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Conflict Sensitive Water Supply: Lessons from Operations

Sandra Ruckstuhl

In partnership with Group W



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Acronyms

CAF	Conflict Analysis Framework
CAG	Community Action Group
CAS	country assistance strategy
CDD	community-driven development
CMWU	Coastal Municipalities Water Utility
ESA	environment and social assessment
ESIA	environment and social impact assessment
FCS	fragile and conflict-affected situations
KRG	Kurdistan Regional Government
MTR	mid-term review
NUSAF	Northern Uganda Social Action Fund
O&M	operations and maintenance
PA	Palestinian Authority
PCNA	Post-Conflict Needs Assessment
PRA	Participatory Rural Appraisal
PSIA	Poverty and Social Impact Analysis
RTE	Real Time Evaluation
SWAp	sector-wide approach project
TTL	Task Team Leader
UNDP	United Nations Development Programme

1. Introduction

Water, as a resource, is integral to human activities of all kinds. The water sector, as a society's means of ensuring individuals have sufficient water is fundamental to recovery and development. While designing and implementing water supply operations in any societal context is a complicated endeavor, doing so in contexts affected by conflict, fragility and violence is inherently associated with compounded challenges. The risks of escalating violence and decreasing stability are exacerbated in situations where access to water resources and services is poor, constrained, inequitable, and unsustainable. Thus, as experienced Bank professionals have stressed, successful conflict-sensitive water supply initiatives put significant emphasis on the complex dimensions of *water access*.¹

One Task Team Leader (TTL) asserted: "Water supply is a concrete result that we want people to get in these situations. We want people to get water access as quickly as possible. Having access to water, especially when it is more regular, helps improve health and, when it is attainable, security. Water access is a peace dividend." Water access, for any part of a population, is determined by dynamic economic, social, political, environmental and security factors at both the macro- and micro-level, which are defined by extant physical and organizational infrastructure. In the context of fragile and conflict-affected situations (FCS),² these acute and volatile factors comprise context-specific political economy systems that, if ignored, can have negative impacts across the development spectrum – from poor hygiene and health to violence between individuals and hostilities among groups. Given these conditions, experienced World Bank operations staff argue that the implementation of water supply projects in FCS contexts is more effective when the conflict context and party interests are considered during operations.

This knowledge product summarizes lessons from World Bank task teams that have prepared and implemented water supply projects in locations affected by conflict, fragility and violence. The findings intend to support operational problem-solving during water operations that are conducted in these situations. The study engaged task team members and surveyed project documentation, consolidating data on contextual and operational challenges and responsive methods that staff recommend. The findings are illustrated in Figure 1: "Lessons in Action: Managing Political Economy for Conflict-Sensitive Operations", which is inspired by the Bank's existing "Conceptual Framework of the Political Economy of Reform".³ Figure 1 does not illustrate a new operational requirement, but rather it seeks to facilitate thinking and problem solving in support of effective, equitable and sustainable water supply and access in FCS contexts.

¹ See Ruckstuhl, Sandra. *Renewable Natural Resources: Practical Lessons for Conflict-Sensitive Development*. (World Bank: 2009), 3-5. In this paper there is further theoretical discussion of how access is associated with "systems of power" (and associated influence in terms of governance, distribution, consumption and ownership) and the associated practicalities of "Renewable Natural Resources Conflict Manifestation and Mitigation" (see Figure 2.1).

² The report "Special Evaluation Study on Asian Development Bank's Support to Fragile and Conflict-Affected Situations" (Asian Development Bank, Independent Evaluation Department, 2010) explains: "The term 'fragile and conflict-affected situations,' or FCAS, has evolved over time. In 2001, the World Bank began referring to nations facing these kinds of conditions as 'low-income countries under stress.' ADB [Asian Development Bank] had employed the terms 'weakly performing countries' and 'fragile states' to describe developing member countries (DMCs) in similar circumstances. ADB now applies the phrases 'fragile situations' or 'fragile and conflict-affected situations' because they focus on operational risks and conditions rather than on the country as a whole" (resource available online at: www.oecd.org/dataoecd/28/46/47186709.pdf). This paper utilizes the same conceptual definition of fragile and conflict-affected situations, but considers that these contexts can prevail in all types of countries regardless of income level, as income and associated human impacts therein can vary across a country and its society. This paper also shortens the acronym to: "FCS".

³ This original model is explained in detail in the report: World Bank, "The Political Economy of Policy Reform: Issues and Implications for Policy Dialogue and Development Operations" (World Bank: 2008),10.

The findings of this study show that clear priorities in process and organizational capacity, with a focus on access, are needed to ensure that water supply operations in FCS contexts are *conflict-sensitive*. In the paper “Renewable Natural Resources: Practical Lessons for Conflict-Sensitive Development” (2009), part of the Social Development Department’s series of studies on conducting effective operations in FCS contexts, the concept of “conflict-sensitive development” is summarized:

Go beyond “do no harm” by incorporating conflict-sensitive development approaches. Projects that go beyond “do no harm” extend beyond a safeguards approach. They consider all three elements of the *triple bottom line*: economic, social, and environmental benefits. This means the value of all three areas is evident in preparatory analysis, project design, and monitoring and evaluation methods, each of which demonstrates some level of innovation. Such projects positively impact communities through improved capacity, policy dialogue, and governance. They also promote social improvements, such as cohesion and accountability. [...] Beyond a basic approach to addressing risks, conflict-sensitive approaches foster sustainability and *resilience*. In an increasingly pressurized world confronted by escalating climatic and demographic change, building social resilience is the most critical form of conflict management.⁴

Task teams explain that capacity, policy dialogue, governance and *cohesion* – as they relate to water supply, renewable natural resource management and other sectors – are characterized in FCS operational contexts by socially constructed institutions, which can perpetuate contention, conflict and violence. A point made by a senior water specialist summed up the comments of many interviewees in this study: “In conflict situations, building water supply infrastructure and running away does not work. Anyone can build infrastructure. The real challenge, especially in these types of cases, is in building institutions.” So, what can be done? Experienced task teams emphasize that capacity development needs to be the primary operational priority in order to support equitable access to water supply. And, they suggest, capacity building efforts should consider policy, infrastructure development, service provision, operations and maintenance, and *the social rules that govern those elements*. As another TTL explained: “We need to focus on re-forming human capacity, and not just on asset building, because this is what helps bring change, stability and sustainability to these contexts.”

The newly released *World Development Report 2011: Conflict, Security and Development* emphasizes that building institutions and improving governance is fundamental for overcoming patterns of violence and instability, as the fragility these conditions foster is a major obstacle to sustainable development.⁵ The report suggests that reestablishing and sustaining security will catalyze substantial development gains, and sustained security requires institutions and stakeholder partnerships that build citizen confidence in the power of collective action, the equitability of justice, and the availability of economic opportunities.⁶ By explicitly acknowledging the relationship between the mitigation of conflict and the progress of

⁴ Ruckstuhl, Sandra. *Renewable Natural Resources: Practical Lessons for Conflict-Sensitive Development*. (World Bank: 2009), 48-49.

⁵ It is important to define the difference between “institutions” and “organizations” as conceived in this study. This is important to note, for in the water sector the term “institution” is often used interchangeably with “organization”. Yet that is not the meaning we employ in this study. In this analysis, as in the 2011 World Development Report, institutions are the “rules of the game” (i.e., they can be legislative, political, unwritten, formal or informal). Organizations, which can also be understood as a type of stakeholder, are “the way societies organize within the institutional context to achieve their goals” (e.g., political parties, conservation organizations, and regulatory agencies). Institutions are the protocols and social norms that define the way in which organizations work. This study is concerned with the approaches to water supply operations that can produce positive outcomes in fragile and conflict-affected country contexts. i.e., how institutional environment and the way groups organize can, within a situation, come together to confront challenges associated with implementing water supply operations in FCS contexts.

⁶ World Bank “World Development Report 2011: Conflict, Security and Development”, (World Bank: 2011), 11.

development, the World Development Report invites a paradigm shift that focuses internal and international efforts toward creating and supporting the institutional capacity that will enable societies to transition from a legacy of violence and conflict to a peacetime norm. In that vein, it is incumbent upon parties involved in water supply operations to pay particular attention to building institutions for effective and just resource management and distribution. In support of that objective, this paper offers operational lessons for managing conflict-associated challenges, which teams have faced in FCS water supply operations. Worthy of future investigation is the fact that these findings resonate with operations in other sectors as well.

1.1 Analytical Approach

The objective of this study is to summarize operational lessons from task teams to inform effective water supply and access operations in conflict-affected and fragile situations. This paper defines common operational challenges and describes actions that task teams have taken in Bank projects in order to address those challenges. Further, the paper explores ways to ensure that water supply projects in FCS contexts, in addition to achieving technical objectives, can also address perpetual causes of conflict and fragility.

Drawing from Bank project experience and the guidance of Bank project staff, this study provides lessons in addressing challenges associated with FCS operating environments and implementing conflict-sensitive water supply operations. These were extrapolated through:

- A desk review of documentation from more than 18 projects with water supply components and which were implemented in conflict and violence-affected areas (see Appendix A for full list); and
- Project case interviews with 15 Bank operations staff, primarily Task Team Leaders, who were involved in the design and implementation of projects with water supply components in fragile and conflict-affected situations (see Box 1 for the list of interview questions).⁷

So as to reveal a diverse portfolio of challenges and action options, the projects reviewed in this study purposefully include diverse country representation, intervention into different FCS conditions, and water supply initiatives of various scales and types.⁸

The operational lessons summarized below can be adapted and incorporated into project processes as Bank task teams work together with clients and development partners to achieve sustainable development objectives in fragile and conflict-affected situations. Figure 1: Lessons in Action (p. 6), which illustrates the structure of the paper, can also facilitate creative thinking. This figure is not meant to be a blueprint for every operation, as what has worked in one context may not work in another. Yet it seeks to support Bank staff as they identify potential operational challenges and strategic opportunities to support recovery, poverty alleviation, and growth based on principles of equity, conflict management, violence prevention, and resilience building.

⁷ In the course of this paper the names of Bank staff and project operations are not always named. The purpose of this is to protect individuals and initiatives in insecure situations.

⁸ Because real operational experience was a key source of data, successful engagement with task team staff also defined the final list of projects that were explored in this study (see Annex A).

Box 1: Interview Questions

This study foremost focused on the experience and knowledge of Bank staff who have worked on projects with water supply components in countries affected by conflict and fragility. The questions asked during interviews included:

1. *Describe the domestic water supply intervention in this project and how it contributed to post-conflict reconstruction, conflict management, or conflict prevention.*
 - a. Increasing access
 - b. Institutions
 - c. Infrastructure
 - d. Local/national levels
2. *Describe the conflict context.*
 - a. Stakeholders
 - b. Institutions (“rules of the game”)
 - c. Interests
3. *How did you overcome challenges in the conflict context through the project (formally and informally)?*
4. *What technical and managerial skills needed to be mobilized to deal with the conflict context?*
5. *What were the project’s impacts with regard to the conflict context?*
6. *What are the lessons for future projects?*

The interview data was augmented by a review of project documents. These documents provided information on project background, conflict context, project components, and outcomes.

2. Model for Action: Conflict-Sensitive Water Supply Operations

This paper summarizes task team lessons to inform water supply operations in FCS contexts. These lessons are structured in a model that seeks to help inform practice. The findings were organized using the extant World Bank Conceptual Framework for the Political Economy of Reform⁹. The guidance articulated in this product (see Figure 1 for a summary model of the paper), seeks to inform effective water supply operations implemented in locations affected by conflict and fragility. As in the extant Conceptual Framework, Figure 1 has a two-part structure that describes continuous interaction between diagnosis and action, meaning they inform one another throughout the process of an operation. The study findings reinforce that development operations in FCS contexts need to be both proactive and reactive in the face of complex challenges and rapid change. And further, the feedback loop represented on the bottom of the figure indicates the need for reflective practice to support well-informed operational approaches that respond to conflict and fragility.

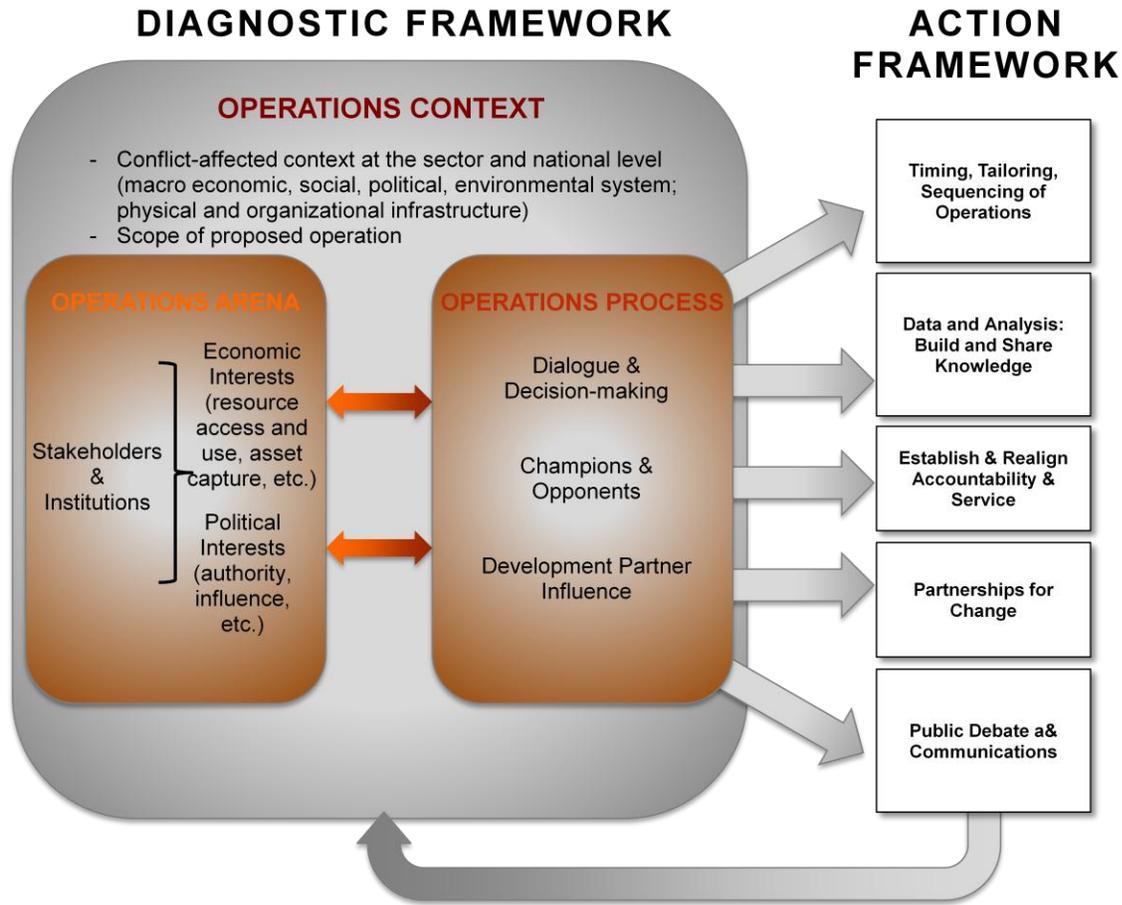
Task teams involved in designing and implementing water supply operations in FCS contexts described key challenges and peacebuilding opportunities that are associated with political economy, characterized by contentious and evolving interests of stakeholders and institutions. Political economy system dynamics can be a cause and a consequence of conflict escalation and cycles of violence. If not adequately considered by task teams, these elements can significantly disrupt water supply operations in FCS contexts. Task team recommendations, as illustrated in Figure 1, advocate for *a systematic approach to analyzing vested interests and powerful groups by looking at (i) stakeholder interest, influence and incentives; (ii) formal and informal institutions; (iii) risk and opportunities, and in turn addressing those through project operations*. This process can help practitioners achieve project objectives and enable clients to work toward long-term sustainable development goals, even in such complex conditions affected by conflict, fragility and violence. Achieving these goals requires capacity development and reform to support prudent action, break the cycle of violence, and restore confidence among first and third party stakeholders. The findings summarized in this paper intend to help inform and improve the effectiveness of Bank water supply operations in FCS contexts by:

- Increasing security and stability to enable violence reduction and peacemaking and inform peace processes; and
- Alleviating poverty, realizing equity and achieving sustainable development to enable resilience building, peacebuilding and reconciliation.

And while no singular formula for recovery and peacebuilding is a panacea, the lessons outlined in this paper can help teams conceive approaches to equitable, sustainable development over an extended timeline.

⁹ This original model is explained in detail in the report: World Bank, “The Political Economy of Policy Reform: Issues and Implications for Policy Dialogue and Development Operations” (World Bank: 2008),10.

Figure 1: Lessons in Action: Managing Political Economy for Conflict-Sensitive Operations



2.1 Diagnostic Framework

As explained above, recommendations of experienced task teams are organized in the components shown in Figure 1, which is modeled after the extant World Bank “Conceptual Framework for the Political Economy of Reform”¹⁰ The Diagnostic Framework in this original model considers the Operations Context, Operations Arena and Operations Process, the analysis of which in turn can inform project actions. Later in this paper the Action Framework (see Section 2.2: Action Framework) outlines operational lessons for addressing challenges in contexts affected by conflict and violence, which have been described by task team staff that have worked on water supply projects in FCS contexts.

2.1.1 Operations Context

The Operations Context in the Diagnostic Framework is composed of two parts. The *conflict-affected context at the sector and national level* can generally be understood through recently conducted macro-level transdisciplinary analyses, such as those that inform a country assistance strategy, a poverty

¹⁰ World Bank, “The Political Economy of Policy Reform: Issues and Implications for Policy Dialogue and Development Operations” (World Bank: 2008),10.

reduction strategy, or a country water resource assistance strategy. Those with focused analysis of conflict and violence (see Annex B for methods and examples) have provided especially prudent information for task teams to adapt to operations within FCS contexts. The second part, *scope of the proposed operation*, is defined during project design and is articulated in project activities and objectives that are described in the project appraisal document. The scope of the proposed operation may also be redefined during the course of implementation if, during this time, Bank and client priorities change. These terms may be outlined in Project Papers, Aide Memoires, Memoranda of Understanding, or other project documents. Such project amendments were referenced as common in FCS water operations reviewed in this study, as task teams' comprehension of data and needs in these especially complex and opaque FCS situations improved during implementation.

Operations seeking to improve water access and supply can be implemented so as to address different types of conflict and violence conditions.¹¹ These operations can include:

- Supporting peacebuilding. Recovery and reconstruction efforts can inform and promote peacebuilding processes – such as development agreement design and implementation along the trajectory toward stabilization, confidence and trust building. Examples of operations that enable recovery and emphasize peace dividends include emergency multi-sectoral operations, such as Philippines SZOPAD Social Fund Project and Liberia Emergency Infrastructure Project, and water supply operations, such as the Sudan Water Supply and Sanitation Project.
- Transitioning from emergency operations to equitable and efficient long-term sustainable development. Water supply, being part of critical infrastructure, can be a part of near-term emergency response operations, such as the Afghanistan Emergency Infrastructure Reconstruction Project, and long-term sustainable service operations, such as the Mostar Water Supply and Sanitation Project. But given the length of a project timeline, it should be assumed that projects with “near-term” and “long-term” perspectives associated with infrastructure and water governance are both part of the transition process. Inherently, conflict mitigation and prevention is part and parcel of this area of work.
- Support of the integration of vulnerable, victimized and isolated communities. Recovery and rehabilitation efforts can promote mutual security and equitable service access among previously neglected, physically insecure or newly emigrated stakeholders (e.g., in refugee areas, impoverished slums, “informal” settlements). Services in locations where crime and violence are pervasive, as in the Honduras Barrio Ciudad and Jamaica Inner City Basic Services for the Poor pre-project contexts, can benefit from upgrading and redevelopment and can support the better integration of these communities into state governance and administrative systems. In remote locations community planning can also enable localized service provision, as in the Iraq Consultative Service Delivery Program.

Though they represent different conflict conditions, collectively these operations involve water infrastructure development; organizational management and technical capacity building; water supply policy and sector strategy formulation. Conflict-sensitivity has been maximized in these operations when

¹¹ Note that these are not necessarily mutually exclusive, as these conditions can exist at the same time in a broad FCS context.

impact objectives have extended beyond immediate needs of supply and when they have considered broader sector strategies that incorporate *water resource management*.

2.1.1.1 Operations Context Challenges

Discussions with task teams and the review of project experiences (see Annex A for list of projects) revealed several common water supply challenges found in FCS context operations. Foremost, these challenges, when left unaddressed, can fuel interest-driven stakeholder action and perpetuate inequity, conflict and violence. This list can be used to quickly identify these challenges in the Operations Context, which task teams warn could be under-examined by operations staff unaccustomed to working in fragile and conflict-affected situations. FCS contexts are often characterized by mutually reinforcing capacity and infrastructure challenges, which are generally most acute when operations begin in locations emerging from an extended period of violence or instability. These conditions signify a need for continuous and intense project supervision, according to interviewed staff, and the need for an especially explicit focus on capacity development and institutional reform – more rigorous than what is required in “normal” (non-FCS) development contexts. These challenges can affect water access and can perpetuate insecurity, competition and cycles of violence:

- Degraded, neglected and conflict-damaged water-related infrastructure (e.g., characterized by high losses, low operational capacity or outdated technology);
- Inequitable supply and unpredictable availability of water due to preferential systems of influence and power and localized instability and violence;
- Unsustainable, inefficient or uncontrolled extraction, pollution and consumption, which depletes resource availability for equitable supply;
- Immediate, near-term needs and lack of holistic long-term sector strategy to guide integrated response and development transition efforts over an extended timeline;
- Underdeveloped and under-enforced water service and management policies and degraded operations and maintenance capacity;
- Non-existent, low quality or diffusely distributed contextual data (e.g., describing infrastructure, institutional capacity, services, water usage, needs, etc.);
- Poor business administration knowledge, and extremely low competency to handle funds and manage corruption (e.g., in project management unit, client government, local service providers, etc.);
- Divided, disconnected sector bodies and poor inter- and intra-organizational collaboration leading to inefficiencies in management, operations and planning (e.g., between different ministries, central government and local bodies, neighboring communities of different political or ethnic affiliation, within project management unit, etc.);
- Poor linkages between government, service providers and consumers, given that relationships are neglected or strained during conflict and violence;
- Unpredictable organizational and individual influence or willingness to uphold policy and standards of sustainable water management and service development;
- Decreased human capacity and slow, difficult capacity building (e.g., because of poor education during conflict, talent leaving the conflict-affected area, death as a consequence of violence and underdevelopment, high staff turnover because of politics and skewed post-conflict job market, etc.);

- Poor operations and maintenance (O&M) as a consequence of reduced knowledge and technical competency, especially in remote and historically unstable locations;
- Difficulty getting qualified professionals to live and work in areas that are insecure or affected by violence;
- Quickly changing contexts that require attention to detail, patience and a high level of supervision (e.g., political dynamics, stability, population movement and informal settlement, environmental health, etc.);
- Lack of client follow-through on decisions reached with the Bank, perhaps due to chaotic circumstances, high demands on human resources, and low professional capacity; and
- Donor and government neglect or have difficulty engaging where needs are more acute – and these are often more remote, disconnected, neglected areas and population groups (e.g., rural areas, locations with large refugee populations or newly emigrated residents, slums).

2.1.1.2 *Scope of Project Operation*

This study revealed a range of operational components that were needed to improve water supply and access in various FCS contexts. Focusing on the objective of increasing service coverage and affordable, equitable access to water supply, these include: multi-sectoral emergency operations; central budget support through multi-donor trust funds; local financing and grant mechanisms; community-driven development programs; slum upgrading initiatives; and a sector-wide approach project (SWAp). To address FCS context challenges, these projects operationalized infrastructure and institutional components (outlined in Table 1). In these cases, the infrastructure and institutions were generally developed to redress damage sustained during conflict or to overcome deficient technical capacity or lack of demand, which furthermore hinders infrastructure development. Infrastructure components in these projects ranged from large-scale and small-scale efforts and high-tech and low-tech solutions. It is worth noting, however, interviewees judged that in FCS contexts low-tech and small-scale solutions were often quickest and most implementable and sustainable in cases where conflict was active, or where beneficiaries were emerging from situations dominated by violent activity. Operations staff also explained that with this method parallel development of capacity is simpler and less technically complex, and suggested that near-term, low-tech approaches can be followed in the long term with efforts to upgrade and expand infrastructure after a period of stability.

Table 1: Infrastructure and Institutional Components of reviewed Water Supply Operations in FCS contexts

Infrastructure Components	Institutional Components
<ul style="list-style-type: none"> • Installation and rehabilitation of bulk water supply infrastructure (e.g., transmission lines, distribution networks and household connections) • Installation or rehabilitation of community taps • New or expanded household connections and purification mechanisms • Water meter installations to monitor consumption • Rain harvesting facilities and reservoirs for multiple uses • Developing, rehabilitating and connecting to surface and subterranean water resources (e.g., rainwater harvesting reservoirs, ponds, boreholes, wells) • Water treatment plants and materials for testing water quality • Construction and establishment of office space for service providers and related government entities • Pilot facilities and replication in other regions of the country 	<ul style="list-style-type: none"> • Sector strategy development, investment planning and policy implementation for sustainable water management, supply systems and service delivery • Establish, reform and strengthen water entities at local and national levels (e.g., central government policy institutions, regulators, utilities and service providers, and water user groups) • Facilitate coordination and relationship development between participating water service providers and users • Capacity development for project management (e.g., financial management, contracting, evaluation) • Technical outreach and training for service providers and users (e.g., operations and maintenance for water points and networks) • Consumer education (e.g., safe consumption, local policies and public participation, technical upkeep) • Community selection of level of service, management approaches, cost recovery • Sector data development and monitoring and information systems • Analysis of attitudes and practices (often include entrenched “coping mechanisms” for dealing with water access in the conflict context) and reform of those to support sustainability • Provision of specialist expertise and funding for assessment, monitoring and evaluation

2.1.2 Operations Arena

The operations arena is the immediate circle of project activity, populated by stakeholders that have varying levels of power and influence in formal and informal service and governance systems. The

stakeholders, which include those that can effect and be affected by a project (e.g., individuals, communities, social groups and organizations), all have an interest in the outcome of the project intervention. Stakeholder **interests** associated with changes in water access, such as power, prestige, economic gain, livelihoods, survival, can fuel competition, conflict and violence. The operations arena is also characterized by **institutions** – the “rules of the game” – that are both formal (e.g., regulations and procedures) and informal (e.g. norms and values). These institutions are validated by perceived justifiable interests. Interests can motivate stakeholder actions and underpin institutions. In FCS contexts these components can be heavily skewed by a history of violence and conflict, in which power, competition, contention and lack of trust can be salient social constructs. Furthermore, the physical and social destruction of conflict and violence erodes organizational and technical human capacity.¹²

Water supply, and access to it, can play different roles in conflict contexts. Understanding the position of water in the conflict-affected context can help illuminate stakeholders, institutions and interests that are relevant to a water operation being implemented within that space. Two important things – stakeholder access to water, and associated institutions that constrain or enable that access – change in the dynamic context of conflict and violence. For example, poor supply and access to water can be a consequence of direct targeting or it can be collateral damage in the midst of military activity or due to management neglect. The second-order effects of water supply and access can change during conflict, sometimes feeding escalatory dynamics and incorporating more stakeholders, institutions and interests. For example, if water access was not a prior flashpoint between conflicting parties, an extended period of conflict and violence, which affects levels of access and challenges expectations, can fuel stakeholder emotion and motivate interest to change this system, even by violent means. The concerns of stakeholders can drive water-related conflict (see Table 2) and can foster development challenges, such as inequity, that fuel conflict and violence.

The schema in Table 2 below is defined by Peter Gleick, Co-founder and President of the Pacific Institute for Studies in Development, Environment, and Security. Used to categorize events for his Water Conflict Chronology database, the matrix offers a typology of the range of roles, acting stakeholders and institutions that could be identified and incorporated into analysis of the operations arena and responsive, informed action.¹³ Applied analysis of the Operations Arena using these categories should consider a fourth category column, “Interests”, by considering *what are the reasons the stakeholder has done what it has to water* and *what are the motivating factors that underpin the institutions?*

¹²Peter H. Gleick, “Water Brief 4: Water Conflict Chronology” (Island Press: 2009).

¹³ Gleick notes: “It will be clear to even the casual reader that these definitions are imprecise and that single events can fall into more than one category, depending on perception and definitions. For example, intentional military attacks on water-supply systems can fall into both the **Targets** and **Tools** categories, depending on one’s point of view. Disputes over control of water resources may reflect either political power disputes or disagreements over approaches to economic development, or both. (paragraph) We believe this is inevitable and even desirable – international security is not a clean, precise field of study and analysis. It is evolving as international and regional politics evolves and as new factors become increasingly, or decreasingly, important in the affairs of humanity. In all this, however, one factor remains constant: the importance of water to life means that providing for water needs and demands will never be free of politics. As social and political systems change and evolve, this chronology and the kinds of entries and categories will change and evolve.” Peter H. Gleick, “The World’s Water: Information on the World’s Freshwater Resources,” (Pacific Institute: 2009). <http://www.worldwater.org/conflict.html>.

Table 2: Gleick’s Types of Water Conflicts¹⁴

Water’s Involvement in Conflict	Acting Stakeholders	Institutions
Conflict of Water Resources	state and non-state actors	water supplies or access to water is at the root of tensions
Military Tool	state actors	water resources, or water systems themselves, are used by a nation or state as a weapon during a military action
Political Tool	state and non-state actors	water resources, or water systems themselves, are used by a nation, state, or non-state actor for a political goal
Terrorism	non-state actors	water resources, or water systems, are either targets or tools of violence or coercion by non-state actors
Military Target	state actors	water resource systems are targets of military actions by nations or states
Development Disputes	state and non-state actors	water resources or water systems are a major source of contention and dispute in the context of economic and social development

When reviewing Bank project experience, Operations Arena components were cited as key considerations for task teams seeking to do effective water supply operations in FCS contexts. As the components of Figure 1 illustrate, and as interviewed staff reinforced, damaged water *infrastructure* is not the only operationally relevant consequence of violent conflict. Stakeholders, institutions and interests are embedded within the Operations Context as well, and are affected by conflict conditions. Hence, operations can happen in a context where there is less physical damage and more emotional damage. This was the context described by one operational staff person who worked in a post-war country context in Africa: “There was no big physical destruction. The massacre was a memory in people’s minds. The event was the elephant. The tension is still there. [...] The conflict was very organized, and that’s what makes people still afraid and behaving in a certain way.” The staff person argued that operations consequently need to put significant focus on capacity development and reform of the *arena components*, especially those that define stakeholder relationships, in FCS contexts.

2.1.3 Operations Process

Destructive dynamics in the Operations Context and Arena that fuel conflict and violence can be mitigated through project operations in several ways. This includes “partnership, participation, and leadership”, which can be capitalized on for the benefit of the operation through dialogue and decision-

¹⁴ Ibid.

making, champions and opponents, and development partner influence.¹⁵ These interconnected considerations, summarized below, are nested within the Operations Context and can inform activities within the Action Framework.

- *Dialogue and decision-making* can illuminate, engage and influence institutional norms and stakeholder relations. When in the context of conflict and fragility, these norms can be contentious and relationships can be weak or exclusive. In the operations arena this can extend from local to national levels, where needs, development plans and policy implementation occur. All participatory activities in an operation are an access point for this change process component.
- *Champions and opponents* can, respectively, enable and challenge the course of development to support equitable, sustainable water access and service provision in the FCS operations arena where broadly beneficial change can be difficult to influence. Activities should establish partnerships and empower champions to develop coalitions of change that consist of manpower, technical knowledge, sector vision-building influence and conflict mitigation skill. They should also consider the ways in which opponents challenge operational goals, and develop activities that incorporate them into a project process as reformed beneficiaries who support equitable and sustainable outcomes.
- *Development partner influence* can be utilized to build reform momentum and sustain stakeholder interest in the stated objectives of difficult operational work. For water supply initiatives in contexts affected by conflict and violence where personal interest and perceived insecurity can influence behavior, development partner influence can be key for ensuring *representative* stakeholder engagement, elevating capacity development efforts, and maintaining standards of sustainable development practice.

2.2 Action Framework

This section outlines approaches that Bank operations staff have used to mitigate project challenges and improve water supply and access in contexts affected by conflict and violence. The action framework consists of five interlinked categories of activities:

- Timing, Tailoring, Sequencing of Operations;
- Data and Analysis: Building and Sharing Knowledge;
- Establish Sufficient and Equitable Service Provision and Realign Accountability;
- Partnership for Change; and
- Public Debate and Communications.

These approaches intend to enable the practical capacity development, as task teams cited this as key to recovery and development in FCS contexts. The action items below, described by operational staff, are meant to inspire creative yet feasible responses to challenges and opportunities in future task teams. This guidance is not a comprehensive collection of cookie-cutter solutions. Instead, the action options should be considered as startpoints that can generate ideas to fit the particular operations context, arena and process of other projects.

¹⁵ World Bank, "The Political Economy of Policy Reform: Issues and Implementations for Policy Dialogue and Development Operations," (World Bank: 2008), 10.

2.2.1 *Timing, Tailoring, Sequencing of Operations*

This category of activities focuses on two, often interrelated, areas. First, they seek to address project logistical issues that consider the complicated demands of operating in FCS contexts: integrated focus on infrastructure-capacity building, building up operational standards, team skills make-up, mission timing, and inter-project coordination. Second, these activities highlight the importance of strategic and focused beneficiary targeting and integrating security considerations into operations design with the objective of maximizing assistance to vulnerable and marginalized stakeholders in FCS contexts.

2.2.1.1 *Balance mutually reinforcing physical improvement and capacity development activities*

Physical water infrastructure improvements tend to be prioritized by stakeholders and donors alike, as these are perceived as momentum-building peace dividends. However, as one interviewee explained: “Anyone can do water infrastructure. Teams need to focus first on the development of institutions and organizations because that’s the hard part.” Some interviewees suggested that a focus on infrastructure development in the wake of violence can be premature because of generally low capacity to manage infrastructure, a matter which has been worsened by conflict conditions. In some project cases, such an assessment led to cutting infrastructure funding mid-implementation. Additionally, interviewees expressed that emergency financing can have limited long-term impact when capacity development is separated from physical development.

Real physical improvements and capacity development need to be observed by stakeholders at the same time, as both are in critically short supply and are a challenge to achieving operational objectives. This recognizes the fact that there is an interdependent relationship between infrastructure and capacity building. Balancing and linking activities in one of these categories can incentivize investments in the other, in turn building and maintaining momentum for change and conflict transformation. For example, infrastructure financing can strategically incentivize organizational development among service providers, as was seen in the reunification of the ethnically segregated water utilities under the Mostar Water Supply and Sanitation Project. In the Jamaica Inner City Basic Services for the Poor Project, residents of dangerous urban slums needed and supported the project’s physical investments, and this motivated increased stakeholder engagement ranging from the neighborhood to the government level. In this context, staff described, social programs worked better when combined with public infrastructure investments, as the latter added credibility to the social services in the eyes of communities that had previously felt victimized skeptical of progress.

2.2.1.2 *Build toward common standards of sustainable development*

FCS contexts are challenged by low capacity, contentious interaction among stakeholders, and overlapping and poorly coordinated endeavors of various outside development partners and donors. These conditions challenge sustainable development aspirations that can be more easily realized in non-FCS contexts. In fragile and conflict-affected situations the achievement of these standards may not be as immediate as practitioners hope. Traditional operational standards need to be scaled and worked toward. Task teams and clients together move up this learning curve and build toward these long-term goals together. Interviewees explained that operational standards were often compromised during operations in FCS contexts as a result of feasibility issues, the need for urgent action, and lack of technical capacity to enact and uphold them. However, project teams can work toward operational standards by building local knowledge of their value and instituting decision-making processes that consider these standards. In contexts affected by conflict and violence, where situations are particularly volatile and security and political relations are quickly changing, operational staff suggest continuously articulating

operational standards helps enable ever-changing stakeholders to adopt sustainable development standards. This method can furthermore institutionalize shared sustainable development standards in organizations where capacity is being developed and procedural incentives are being reformed.

2.2.1.3 Expect long preparation and intense supervision

TTLs who have led projects with water components in FCS contexts consistently emphasized two principles of success in the midst of conflict transformation: patience and flexibility. Regular Bank operational methods, they explain, should not and do not apply in these contexts. Operational Policies 2.30 (Development Cooperation and Conflict) and 8.00 (Rapid Response to Crises and Emergencies), which were released in 2001 and 2007 respectively, have formalized the operational distinctions between “normal” and “conflict-affected” contexts. Efforts in FCS contexts need strong and relatively constant Bank team field presence, for several reasons, including:

- Context, arena and processes can be volatile and unpredictable in the midst of conflict dynamics;
- Initial levels of trust between country stakeholders can be low and collaborative relationships between stakeholders and the Bank can be weak;
- Whether through competing priorities or low capacity, stakeholder follow-through on agreed activities can be slow and ad-hoc, even when Bank teams perceive activities as being “simple”; and
- Country stakeholder knowledge of project implementation procedures can be limited due to a lack of experience.

A strong and consistent field presence from implementation through to completion helps ensure responsiveness and critical relationship building in FSC contexts, where social division and conflict-influenced perspectives can be obstacles. Teams need to budget time adequately for such an extended field presence. For example, the Mostar Water Supply and Sanitation Project required 16 months of preparation time, with the full team in the project location for more than half of that time, so that proper relationship building and operational standards were rooted in an environment where, upon entry, distrust had been high. The Iraq Consultative Service Delivery Program offers an example of an effective and innovative solution to maintaining a field presence during supervision. This effort saw the hiring of a full-time field consultant to monitor and evaluate contextual dynamics and project implementation results in real-time, and assess potential locations and communities where the project could be expanded. This consultant’s activities, which have been carried out in an area of the country where there is no Bank mission office presence, were cited by the TTL as a key source of critical information that improved the project’s effectiveness.

2.2.1.4 Consider public security as being linked to sustainable water access

Water operations can be affected by a lack of security, which means limited access to project areas and a shortfall in achieving project objectives. For example, a household survey in Honduras, which informed the design and implementation of the Barrio Ciudad Project, found water supply and violence, respectively, to be the first and second greatest concerns of the poorest urban slum communities. Consequently, the country government and the Bank team saw that rectifying these problems required an integrated solution. In general, projects can help improve public security by including the explicit consideration of security building into planning and implementation processes. This means reducing the vulnerability of stakeholders who are at risk in a cycle of conflict and violence, and reducing the level of

opportunity for spoiler groups who seek to profit from the instability that they perpetuate. For example, in the Philippines SZOPAD Social Fund Project, all community-based subprojects sought to improve the local security situation and capitalize on improvements as they emerged. This allowed for simultaneous progress in terms of improved government engagement and statebuilding in these previously isolated communities along with public infrastructure development and capacity development. Experience has shown that, as security increases, communities are more likely to effectively invest their time and money into sustainable water systems and also in parallel become less isolated from state systems of governance and service provision.

Urban renewal projects in neighborhoods where high levels of violence and crime perpetuate poverty and insecurity also benefited from an integrated, comprehensive approach to public safety and water supply improvement. Projects such as the Jamaica Inner City Basic Services for the Poor Project, Honduras Barrio Ciudad Project and Brazil Uberaba Agua Viva Project sought to increase public safety in urban slums through a series of infrastructure and social investments. Fundamental to this was increasing communities' standards of living through provision of public infrastructure and services and with an eye to influencing systems of violence and crime that dominated these contexts and inhibited equitably distributed development outcomes. In these three projects, water supply components have been coupled with efforts to enhance police presence, public lighting and road construction to improve safe access to more reliable water services. Furthermore, progress in reducing violence and improving security has led to increased follow-on government and donor investment in water services and infrastructure.

2.2.1.5 Utilize CDD-style operations where water access and services are remote

Project operations that reach out to remote, often historically neglected regions face a distinct collection of challenges. Water infrastructure and services can be sparse or nonexistent, needs can be especially acute, grievances and instability levels can be high, governance and service capacity can be weak, and professional talent can be in short supply. Bank teams that have worked in such locations suggest that a community-driven development (CDD) model has shown real utility in conditions of extremely low access and high water resource scarcity (e.g., as seen in development efforts in certain parts of the Middle East North Africa Region, such as the Iraq Consultative Service Delivery Program).

A CDD approach can allow for operations to be tailored according to the physical and institutional context and arena.¹⁶ TTLs emphasized that using a CDD model is *not* about cookie-cutter replication, but should be thought of as a creative means to help generate transferable, adaptable operational lessons associated with working in volatile FCS environments. These can in turn be used for scaling-up water interventions. TTLs suggested that CDD components can be beneficial add-ons to big infrastructure projects as they can be tailored to address localized beneficiary needs and FCS conditions.¹⁷

2.2.1.6 Integrate FCS operational knowledge within a tight team

Though there is a tendency for FCS-context water operations to focus time and financial resources on infrastructure development, particularly in early response emergency operations, TTLs stress the need for

¹⁶ It is also worth noting, however, that CCD is not a silver bullet, as it requires capacity at a local level among civil society and within government; and while consultant contracting might be seen as a stopgap solution in these conflict-affected conditions, TTLs emphasize that contracting with external parties does not bring the sustainable results that are required for long-term FCS recovery.

¹⁷ A TTL suggested that operational staff would significantly benefit from an analysis of CDD project experience in FCS contexts, which should examine models of success and failure specific to understanding localized conflict dynamics and addressing conflict drivers.

collectively sound technical *and* social approaches that inform projects from design and implementation. This requires the consistent inclusion of expertise in how to operate in these FCS environments. TTLs reported that there is added value when at least one infrastructure and one social expert on the team has previous experience in conducting operations in FCS contexts. Local knowledge and experience, drawn from the Bank's or the client's ranks, can also be harnessed.

Interviewed TTLs explained that social experts with experience in FCS contexts were especially skilled at monitoring conflict dynamics and conceiving methods to ensure that violence is mitigated, improving project success.¹⁸ Though it can be rare, extended staff experience in the particular operations arena also aids success. One TTL reported that her contextually knowledgeable task team was involved in preparation, implementation and closing of the Mostar Water Supply and Sanitation Project, which involved the complex reintegration of an ethnically divided water utility. The involvement of the same team throughout the project lifecycle enabled the Bank to develop strong relationships with the client under extraordinarily difficult circumstances, and this over time enabled significant improvements in the performance of the sector.

2.2.1.7 Consider the country project portfolio and sector-wide initiatives

In FCS contexts, where operations and client needs can be especially intense and human resources spread especially thin, coordination between sector initiatives is a challenge. Ideally, as in the case of the Yemen Water Sector Support Project, efforts can be coordinated under a structured sector strategy. In many FCS cases, however, detailed sector-specific strategies are missing, and other steps are needed to build cross-sector coherence in the interim. For example, TTLs explained that they felt that their water supply projects benefited from linking in with the wider staff network that was working in related sectors, such as health and environment, as this helped to fill technical and human resource data gaps and provide additional insight into the dynamics of the operations context and arena. Engaging with other sector actors beyond the Bank was also productive, for example when an in-country sector working group coordinates FCS response and development efforts. In West Bank/Gaza, for example, there are such working groups for each sector. The water sector working group, which is chaired by one official from the Palestinian Water Authority and one member from the international donor community, brings together on a monthly basis representatives of international and local implementing agencies, donors and the Palestinian government. These individuals share data on ongoing projects and forthcoming initiatives. This type of approach can translate into better support for the client government and can empower sector leadership to develop and implement informed investment strategies.

2.2.1.8 Target needy, less influential beneficiaries in order to achieve project objectives

TTLs who have managed water operations that have confronted and mitigated conflict-related challenges emphasized the need to focus benefits on areas where needs are most acute, as these can be hubs of instability. These are often more remote, disconnected, neglected locations and population groups (e.g., rural areas, locations with large refugee populations or new residents, informal residences such as slums, etc.). There is often less donor attention in remote areas, particularly in unstable contexts, because they are not easily accessible to the task team and client partners. Cities get far more attention from donors and policy-makers, and urban areas in some project contexts were deemed as more powerful because

¹⁸ In the Yemen Water Sector Support Project, the team seeks to conduct continuous "situation analysis", an assessment of conflict causes and dynamics, so that they can be addressed through the project, preventing the project from contributing to conflict escalation and sabotaging sustainability.

more influential members of society (e.g., politicians and business members) live in those areas. Powerful interest groups, particularly those associated with the threat of violence in the context of unpredictability and instability, can seek to influence project design so as to steer water access benefits to their allies and constituents. Formal development partners, including those in client governments, have shown in past projects that they are capable of making such attempts – thus fostering inequitable water access, perpetuating poverty and instability, and enabling preferential systems of power. Stated project objectives generally do not intend to facilitate such detrimental outcomes.

TTLs who have implemented water supply projects in FCS contexts argue that, to avoid these unintended sequences, beneficiaries need to be selected in firm alignment with project objectives, and the prioritization process should not be overrun by power and threat of certain interest groups. Therefore, as team members engage with the client and with other stakeholders, they should diligently and repeatedly communicate project objectives and exercise transparency with regard to beneficiary targeting. As one TTL explained: “The government sometimes will not agree with the target indicators, but it is the Bank’s role to enforce these standards based on our principles and project objectives.” When project staff are engaging groups having poor relations with the client government or operating in contested regions, maintaining this perspective can be particularly complex. Nonetheless, water projects have shown that even in the context of this kind of discourse, political leadership that had previously objected to certain beneficiary targets eventually agreed to branch work into these areas, which in turn led to improved relations between conflict parties.

2.2.1.9 Reduce donor dependence through increased service payments

After a legacy of violence, conflict, and neglect from central authorities, consumers can be accustomed to receiving *emergency* public services from international organizations. TTLs implementing water projects in FCS contexts have found, for example, that sometimes the communities they were engaging had a history of receiving from humanitarian aid agencies bottled or tankered water, chlorine tablets or other means of purification, and maintenance services. If these services were provided at a minimum or zero charge to the consumer, then newly imposing tariffs to maintain services risked causing consumer shock and customer dissatisfaction, further fueling instability. Payment collections, furthermore, could be difficult to conduct, and these subsequently could lack the support of power-seeking stakeholders who see political risk in such activities. Yet certain tariffs are important means of supporting sustainable service provision, improving water access, poverty alleviation and growth in the long term. The Mostar Water Supply and Sanitation Project, for example, successfully achieved tariff reunification in a place where the two sides of the ethnically divided city had previously been accustomed to two different tariff structures. In sum, one group had been used to paying less for water services than the other, but the project successfully brought the whole city to the same level of payment. Some project staff cited that projects need to “introduce the economic value” of the service, helping to instate user fees early in sector investments, even in FCS contexts. Their sense was that this is part of helping communities own the infrastructure, maintain it, and use it responsibly. This kind of change in turn helps reduce donor dependence – a critical accomplishment in the endeavor to achieve long-term sustainable development *and peace*.

2.2.2 Data and Analysis: Building and Sharing Knowledge

Conducting analytical work in FCS contexts can be especially challenging because data can be difficult to get and conditions can quickly change. Value-added data collection and analysis in FCS project contexts should *inform* operations that improve equity and interrupt cycles of violence and should engage

stakeholders and thus *empower change* within systems of perpetual conflict. This requires some focused attention on previously isolated, neglected or violent locations where communities generally face critical conditions, immense service and capacity deficits and high levels of vulnerability. This category of action extends beyond traditionally required analysis for Bank projects, such as safeguards assessments. Rather, analytical activities that can address the challenges in FCS contexts are much broader; they consist of informing operations that confront a legacy of conflict, filling data gaps, and promoting short- and long-term recovery and development objectives. See Annex A for an outline of some highly regarded analytical approaches that have been used to inform some Bank water operations in FCS contexts. It is important also to note that in these instances data collection and analysis can also be rapid, less formal and report-oriented. Analytical efforts at all stages of operations can be helpful. For example, all engagements with stakeholders are opportunities to collect and analyze context, arena, capacity and impacts. And while participatory analytical approaches can build stakeholder capacity to assess needs, options, and potential outcomes, analysis led by an outside party can provide additional perspective on political economy dynamics.

2.2.2.1 *Consolidate and build on existing data*

Hydro-geological data, locations and conditions of existing infrastructure, service patterns, user behaviors, safety issues when accessing water, and the geospatial and social disaggregation of these categories – this is all critical data that water project teams in FCS contexts have found necessary yet difficult to obtain. Data can be scarce, for it may not have been collected or archives may have been destroyed during periods of violence. Data that does exist can be of poor quality and information on certain regions and groups may be under-represented. There can be constraints on the time and resources available to conduct optimal new data collection and analysis in FCS situations, especially during early response. Access to good data and analysis that does exist can be limited by proprietary claims and custodial archiving by different government entities, donors and other third party organizations.

Existing data can be diffuse, in which case it must be consolidated if it is to inform operations and policy. In the case of the Afghanistan Emergency Infrastructure Reconstruction Project, the team arrived in the field and found that water infrastructure maps had been destroyed during former Taliban leadership. The team rectified this by convening the sector’s “institutional memory” – local plumbers – in each of the project-targeted towns. The local experts sketched out pipelines and tank infrastructure on satellite images, which in turn were transposed onto Geographical Information System software platforms by World Bank financed consultants to create new water supply facilities mapping. As another example, the Sudan Water Supply and Sanitation Project included a component for updating and improving an existing database (management information system) that housed existing data involving mapped locations and status of water points and groundwater resources. Database establishment was foundational to setting up completely new water management institutions in locations historically isolated by conflict.

Along with data consolidation efforts, staff noted the importance of enacting better data management principles so that datasets can be used not only for a one-off project endeavor, but for long-term sector planning, improving the enduring value of the effort. In West Bank/Gaza and in Afghanistan, government-owned and -managed country water data portals, which include information on water resources and investments, have reputedly been developed to inform and monitor policy and track funding and implementation progress. For these to be maintained, however, incentives need to be put in

place for client governments to manage the data well, build staff data management capacity, and record and enforce documentation standards.

2.2.2.2 *Maximize public data availability*

Task teams, development partners and client governments often face data gaps because data that does exist is not effectively accessible. To avoid feeding into such an unnecessary data problem, several interviewed Bank staff advocated for deliberately open data sharing. They explained that data is important to keep all field actors, including stakeholder beneficiaries, aware of changes and new developments or investments. While a common tendency among donors and international implementing partners is to disseminate data via the internet, this is not a cure-all, as computer technology can be problematic in some locations, especially remote rural locations. To mitigate these challenges, data being shared at the country level, from the government to the grassroots, can also be in a range of media, including print, transmitted by SMS, tacked on bulletin boards, or painted on the side of buildings. The best means for data dissemination are context-specific, so project teams should ask local stakeholders to identify effective vehicles to share data with them.

2.2.2.3 *Use analytical initiatives to enable organizational coordination*

Data is needed in order to effectively coordinate. Political conflict - which can be escalated by donor dependence, insecurity and water variability - adds another layer of complexity to fostering collaborative relations between government entities that have a history of competition and animosity, such as that seen in some countries between ministries of water, environment and agriculture. Bridging these institutions is especially challenging in conflict and violence-affected contexts. For example, at the start of the Sudan Water Supply and Sanitation Project, rural water supply, urban water supply and irrigation were each mandated to a different ministry. The task team reported that implementation became more efficient and better informed after the president issued a decree that all water projects be consolidated under the Ministry of Water. In Yemen, organizational bridges were built between the Ministry of Water Resources and the Ministry of Agriculture as the water sector Poverty and Social Impact Assessments were conducted,¹⁹ and the subsequent Yemen Water Sector Support Project has maintained this level of integration through its project implementation processes. This can improve government-building and transparency. Reforms in stakeholder relations and institutions in each of these cases helped to consolidate planning for a holistic, sector-wide approach to water investments.

The West Bank/Gaza Assessment of Restrictions on Palestinian Water Sector Development engaged foreign and domestic partners across the sector to exchange, consolidate and analyze regional data on water access and supply, water sector investments.²⁰ Involving Palestinian and Israeli authorities in an analytical process rectified some previous investment blockages stemming from communication breakdowns between these parties. The Bank, which led the analysis of this politically contentious topic, helped to document and circulate sector knowledge and empowered the parties to respond to these findings through reformed operations and policies.

¹⁹ Republic of Yemen, GTZ and World Bank, "Yemen's Water Sector Reform Program—Poverty and Social Impact Analysis (PSIA)," (World Bank: 2007).

²⁰ World Bank, "West Bank/Gaza Assessment of Restrictions on Palestinian Water Sector Development", (World Bank: 2009).

2.2.2.4 *Use participatory data collection and analysis methods to empower stakeholders*

Stakeholder consultations can be used as an opportunity to consolidate existing and diffuse data, such as that about water access patterns, user behavior, and service availability during historical periods of conflict and violence. Such value implies that it is worth working through the logistical difficulties, urgent timelines, and contentious relationships often associated with consultations and to go beyond minimal requirements, referred to by some interviewees as a “simple box check”. During consultative exercises, stakeholders can validate and verify data to inform analytical work, such as that being done by compartmentalized teams in urgent contexts. In turn, consultations can build contextual awareness and analytic capacity among stakeholders when conflict could have reinforced more narrow perspectives. Consultations can build a sense of interest and responsibility in stakeholders as they invest time in water supply improvements. Consultations can also impart critical thinking with regard to data quality and utility, which enables more informed decision-making in the long term.

2.2.2.5 *Augment existing analytical exercises with conflict and political economy considerations*

Incorporating components of the Diagnostic Framework into other analytical products or existing methodological approaches (see those listed in Annex B) can improve conflict-sensitivity in operations. Interviewed staff referenced the benefit of going beyond a safeguards perspective and strategically incorporating perspectives on conflict and political economy dynamics into required analytical products, particularly the environmental and social impact assessment. In this sense, given the level of contextual complexity, analysis should be maximized and go beyond the minimum requirements of safeguards assessments, and consider opportunities for mitigating the potential for conflict escalation and preventing violence. For example, the Yemen Water Sector Support Project will incorporate political economy analysis into the project’s annual environmental and social assessment (ESA), which informs the implementation of the country’s water sector strategic plan. The project team recently determined that to overcome contextual challenges and improve project outcomes they needed to refine available analytical mechanisms, such as this ESA tool. They indicated that ongoing analysis would help allow for course-correction in potentially contentious, volatile and fast-changing conditions that pervade Yemen and its water sector.

Vulnerability, conflict and violence have in some cases been incorporated into preparatory environmental and social impact assessments (ESIA) for whole projects. In the Northern Uganda Social Action Fund Project, a base-line household survey, which included a module on vulnerability and conflict, was conducted for the 18 project districts.²¹ In the case of the Brazil Uberaba Agua Viva Project, community safety was an integral part of the ESIA, and because this issue was integrated into the assessment of other infrastructure and service needs, including water, multi-dimensional project solutions were in turn conceived and operationalized through the project. Interviewed water project staff agreed that ESIA’s need to be used “beyond safeguards” so that the winners and losers can be identified early, the project plan can be modified accordingly, and further conflict and violence can be prevented.

2.2.3 *Establishing Sufficient and Equitable Service Provision and Realigning Accountability*

This category of activities focuses on the need for the development of in-country technical and planning capacity for more transparent and effective sector management. These action areas can enable the

²¹ World Bank, “Implementation Completion and Results Report: Northern Uganda Social Action Fund Project (Uganda)” (World Bank: 2009), 36.

identification of “champions”, inspire the development of coalitions for change, and mitigate project risks that are associated with spoiler groups. Seven mechanisms to realize this are described below.

2.2.3.1 Use water sector strategies as a tool for long-term planning

As countries emerge from conflict, sector strategies can be weak or non-existent, and especially in volatile contexts the client’s capacity to develop and lead sector strategies might be deficient. Furthermore, in countries where certain regions are affected by violence, such locations sometimes find themselves left out of country development plans and sector policy implementation. TTLs expressed that a water sector strategy, such as those in Yemen and Rwanda, helped contextualize a coherent project approach and provided a structure for coordinated input from communities, third parties, and central authorities in the context of large-scale re/construction. In the case of the Yemen Water Sector Support Project, a TTL explained, the strategy provided a common framework of objectives and a universal language among the development partners, which simplified some inter-organizational coordination in a context with many donor actors. (See “Consider the country project portfolio and sector-wide initiatives” in Section 2.3.2 Data and Analysis, above, for guidance on how teams have managed under circumstances where a water sector strategy was absent.)

2.2.3.2 Link local and government entities so that they can collaborate to improve water access

Constructive linkages between local and government entities, TTLs asserted, can have multiple benefits. To begin, local engagement in some projects effectively enabled and motivated populations to organize, which is particularly important in rural, remote or isolated beneficiary communities where engagement with the government may have been limited before, for example in the midst of conflict, violence and insecurity. This has included, for example, slums and other “informal” settlement areas, where public investment has been a low government priority and in turn the people are have grown accustomed to neglect. To address violence and instability, some projects aimed to incorporate neighborhoods where the “entrenched poor” needed to be organizationally and institutionally integrated into the physical fabric of the larger administrative area, showing residents they are “true and equal” and not just an “isolated enclave that is socially and physically excluded”.²² In tandem, one TTL explained, it is useful to engage government authorities incrementally and strategically, with the objective of keeping them informed of local activities and building relationships with consumers under this positive premise. Through this kind of engagement local stakeholders could communicate to government authorities their water usage patterns and needs and inform decision-making on location and types of facilities and services, technical support for operations and maintenance (O&M) and use, and government authorities can provide technical and financial support where needed and as possible. A TTL explained that in some project cases politicians have found that bringing real local improvements has contributed to their popularity. This benefit motivated some politicians’ engagement and support for local development initiatives, and thus promoted local-government linkages where conflict and violence had previously weakened them.

Multi-level initiatives also have aided in the restoration of mutual trust between central/local government and the rural communities. And the risks of confrontation in structured engagements were often mitigated by the representative participatory arrangements that governed implementation processes. This approach also helps devolve authority to rural, marginalized areas, which staff cited as

²² Anonymous quote from a TTL.

the best way to improve services in remote locations, as seen in the Iraq Consultative Service Delivery Program and the Rwanda Rural Water Supply and Sanitation Project. At the same time, successful decentralization processes anchor the legitimacy of elected district authorities, helping to restore trust between central and local governments and communities. A TTL of the Rwanda Rural Water Supply and Sanitation Project explained: “Anything that can be done at the local level helps release tension and build trust in any sector”.

2.2.3.3 Establish publicly accessible office space for water entities

Several water supply initiatives explored in this study found that violence and conflict-affected locations saw an especially low presence of government and service staff and administrative facilities. The scale of this deficiency in the different project cases is generally a consequence of location-specific insecurity and capacity debilitation during periods of conflict and violence. This was often an indicator of: the absence of water entities for service provision, governance and technical support; deficient linkages and communications with local users; and poor water service availability. Several projects found that establishing publicly accessible office space for administrative entities supporting water supply provision helped to simultaneously improve water access, inform operations and maintenance, and better engage and educate local users. Investments in some project cases, including the construction of office space, purchase of office equipment, and training of administrative entities on how to incorporate long-term operating cost into their budget projections, realized several outcomes. Physical office space provides water users with a gateway to sector activities, where local stakeholders can engage authorities involved in water service provision and policymaking, register concerns, and request assistance. Indeed, projects that assisted in the establishment of such office space found that these initiatives improved trust and communication and provided an information gateway through which local awareness was raised on projects, service, safe water use, and O&M. In addition, these facilities were used for education and training (e.g., on topics associated with water, environment and health) and for community consultation activities. The Sudan Water Supply and Sanitation Project is a fundamental example, where operational staff helped to build water governance from square one. The project has financed the construction of professional space where staff conduct their work and engage consumers: an integral part of setting up a system of water governance.

2.2.3.4 Focus transparency and accountability measures to mitigate elite capture of project benefits

As one TTL described: “Conflict breeds corruption quickly. As institutions crumble, so does accountability.” Staff frequently mentioned that in FCS project contexts there is especially low capacity within project implementation units and client government offices to manage contracts and finances. In the midst of a violent crisis or in the immediate aftermath of a ceasefire or peace agreement FCS contexts can be chaotic and opaque – crowded with donors and suddenly flooded with funding, and with overstretched human and time resources accountability can be low. These circumstances can be ripe for corrupt activity, as stakeholders can seek to channel financial resources and other project benefits for their personal gain. Experienced teams report the need to manage risk through improved transparency and rigorous oversight. For example, the Northern Uganda Social Action Fund (NUSAF) has attempted to reinforce bottom-up accountability through its “transparency, accountability, and anti-corruption” subcomponent. This project faced a few accountability challenges, as elite capture of project resources and benefits occurred in some remote sub-project communities. In response, several measures were established to address these accountability issues, including a transparent Information, Education and Communication system, the publishing of all sub-project releases, a collaborative agreement between the NUSAF task team and anti-corruption agencies, ongoing bolstering of financial management systems and

instating independent annual audits in addition to normal audits. With these measures elite capture problems were successfully addressed.

2.2.3.5 Monitor changing demographics and levels of competition

Quickly changing demographics in the context of violence and conflict can result from physical, social and economic insecurity. Project staff cited that unpredictable population movements can complicate the objective of providing sustainable, equitable water supply that meets community needs. Groups may move to population centers, leading to expanded slum areas and refugee settlements, and furthermore because conditions in these neighborhoods can be insecure these residences may be temporary. Furthermore, if escalation in social tension and violence is a real contextual risk, then local insight is all the more critical for sustaining development outcomes, as this can inform operations in a timely and prudent manner. Some reviewed projects tapped community administration offices to monitor ongoing and projected population changes, associated shifts in need and technical capacity, and potential conflict over water access. This information was both formally and informally collected and shared to support central government and the Bank team as they sought to address these ongoing changes, maintain informed operations and decision-making, and conduct course corrections as needed.

2.2.3.6 Build up from scarce technical capacity to operate and manage infrastructure

Across the water supply projects explored in this research, O&M-related challenges were consistently cited as a primary challenge in FCS contexts. Subject area populations, particularly those that have endured several decades of conflict, might be dependent on emergency aid and other donor services to the point that they have either lost or not learned O&M skills, for example as a consequence of death, migration and low education. One TTL lamented: “People use the infrastructure until it breaks. No one tries to fix it or report it. They just find another source for water, even if they have to fight for it.” To address O&M issues, the TTL of the Sudan Water Supply and Sanitation Project suggested that it is important for projects to: increase users’ capacity to diagnose, resolve and prevent certain technical issues; provide realistic and usable means for reporting to service providers problems with equipment and infrastructure; and build up technical support staff who can perform O&M and train local users to support O&M efforts. The Iraq Consultative Service Delivery Program TTL, citing the lack of water infrastructure technical knowledge in many conflict-affected communities, recommended that, to improve O&M water service, providers need to prioritize the incorporation of technical engineers so that they can offer necessary and equitable service to water users. Furthermore, she added, these engineers should also build the capacity of locals to do their own O&M as needed.

2.2.4 Partnerships for Change

Building strategic partnerships between the Bank and the client, including country leadership and project beneficiaries, can help enable change among stakeholders and institutions and interrupt cycles of conflict and violence. This demands targeted, intentioned capacity development in areas where operational teams have identified strategic value and opportunity. Five mechanisms to realize this are described below.²³

²³ Additionally, interviewees noted the value of partnering with local staff who by nature have critical local knowledge (e.g., insights into conflict sources, party relations, politics and political economy dynamics, and human talent) is particularly important to tap in volatile, conflict-transforming conditions. Water sector specialists have found these partnerships with local staff, which were often not strictly task team-based, as important means for adapting to and conducting operations in transitional FCS contexts.

2.2.4.1 *Strategically develop management and service human resources*

As discussed above, FCS contexts typically feature human capital with low managerial, service provision and technical capacities. This can derive from conflict-driven death rates out of balance with peacetime norms, migration, low education and limited professional exposure to functional water supply systems. Furthermore, water entities that develop and enforce policies and which provide water services might be inadequate and ineffective; in many projects, these entities can have major technical and administrative gaps – or governance and supply authorities can be entirely non-existent.

Several TTLs referenced deficits in education, especially in the areas of technical and management background, as key blockages in developing stakeholder and institutional capacity for sustainable water services. Also of premier importance are the benefits that stem from having capacity of the implementing agency be purposefully and strategically built in from the outset, including financial management, contract management, technical knowledge, and infrastructure design. Especially over a timeline of several years of conflict, though water professionals may have graduated from a local university, they also may not have observed “proper procedures” for conducting management and performing O&M activities. In such instances the Bank team should tap this local talent for their contextual understanding and integrate it with others who are practically knowledgeable in how water service systems have functioned successfully in peaceful contexts. Additionally, task teams have seen that professional education for experts who have stayed in-country during conflict and violence is key to improving *locally-relevant* capacity. The Philippines SZOPAD Social Fund Project and the Iraq Consultative Service Delivery Program used mentoring and coaching to build governance and technical capacity to support sustainable infrastructure management and service provision in locations where because of conflict there previously had been little to none. Other projects conducted targeted trainings. In Iraq, for example, Community Action Groups (CAGs), who were elected to design and implement community projects, were mentored and trained by facilitators and staff that had, in some cases, served on previously successful CAGs. The Mostar Water Supply and Sanitation Project executed professional training activities on customer management, billing, finance, technical issues, and management. These were done in a “case study system” location outside of Bosnia and Herzegovina, which gave the participants external exposure to effective water systems, helped them to build substantive linkages with outside experts for the purpose of long-term technical assistance, and generated constructive working relationships between the conflicting parties.

In some projects the Bank has supported staffing efforts as governments sought to establish or reform existing water governance and service entities, which had been severely impacted by war and violence as human resources had been lost and inter-party relationships strained. Bank staff found that providing an “institutional” assessment – a study of organizational structure and capacity – was an effective entry point into strategic staffing efforts. In the context of difficult conflict and political economy dynamics, where consideration of stakeholder and institutional interests is considered integral, Bank staff deemed informal and formal approaches to recruitment to be useful. Furthermore, project team members who were involved in capacity development specified the benefit of nesting search processes within a trusted network of people who understand both the organizational needs and the challenges of the conflict-affected operations context and arena. Importantly, the search processes focused both on candidates’ talents, including practical and technical expertise, and on their value systems, as demonstrated in their professional history. This process can help notionally identify strong professional candidates who can also be champions of change. Then, such newly hired professionals can also subsequently be involved in future selection teams, building their own coalitions for change as they search for staff that will work

under them. It is also critical for all parties involved in professional selection for client government positions to manage the hiring process in a way that avoids the stakeholder perceptions of favoritism, as partiality can disenfranchise parties and rekindle grievances.

2.2.4.2 Partner with champions of change among government staff

TTLs agreed that client government champions across a spectrum of issues are especially important for making genuine headway throughout the project lifecycle under such strenuous circumstances. The Post-Conflict Needs Assessment conducted with Palestinian officials in Gaza following the December 2009-January 2010 Israeli offensive is a strong example of such an initiative in the water sector (see Box 2). In FCS contexts, where needs are diverse, TTLs emphasized the relative importance of a multi-sectoral, integrative approach to water supply investments. A range of government champions is also needed to enable the administrative reunification of divided communities and the integration of previously underserved regions. For example, during the Mostar Water Supply and Sanitation Project, partnership between the task team and the city councils and mayors led those local authorities to sign Memoranda of Understanding, committing them to the water utility's reunification. As a consequence, this was the first public service provider to be reunified after the war in Bosnia and Herzegovina.

Another mechanism for change championing, it can be beneficial for task teams to unite returnee and local talents that exist in government offices and other water and public service organizations. The diaspora of population elements might achieve educational and professional growth outside of the conflict-affected area while also keeping ties to the situation. A TTL suggested that such people, who return with new-found knowledge and skills and the objective to aid recovery and development efforts, can be extremely valuable and practiced champions with which to partner. In comparison to the cohort that did not or could not leave during the violence, these professionals can have higher standards of governance and service from working in more functional environments and more efficient water organizations, better fiduciary standards, stronger technical/engineering backgrounds and an overall higher level of education. In addition to the personal capacity they bring to the government entities they join, they can generate further capacity by professionally mentoring local talent.

Box 2: Case Study of Post Conflict Needs Assessment in Gaza

The Coastal Municipalities Water Utility (CMWU) is responsible for water and sanitation service delivery in the Gaza Strip under the Palestinian Authority (PA), and has a long-standing relationship with the World Bank through various projects. In December and January 2008-2009, utility service delivery capability was crippled following a three-week Israeli military offensive to disrupt Hamas rocket fire. In addition to widespread infrastructure damage, the offensive produced immediate public health and environmental safety concerns for the Gaza population. With the United Nations Development Programme (UNDP) designated as the lead agency in the early recovery cluster and network, the international community undertook the Gaza Early Recovery Rapid Needs Assessment, using the Post-Conflict Needs Assessment Methodology (PCNA), directly following the cessation of hostilities in January 2009 to assess full damage incurred by the Palestinian people and infrastructure in Gaza, and to identify immediate response needs, mid-term reconstruction requirements, and long-term recovery strategies.

In the days immediately following the violence, the CMWU and World Bank collaboratively used the needs assessment as a vehicle to prioritize response operations and reconstruction needs to restore water and sanitation service delivery, and to identify sources of contamination of water supplies. The process was implemented over a 6-week period leading up to a donor conference on March 1-2, 2009 in Sharm el-Sheikh, Egypt. The PA developed the Gaza Early Recovery and Reconstruction Plan with technical assistance from the United Nations, World Bank, and other partners. Because the PCNA was implemented rapidly and thoroughly, the PA and the international community were able to effectively mobilize donors to raise funds for recovery and reconstruction. This process also bolstered international partners' and the PA's ability to negotiate the procurement, transportation, and delivery of chemicals and materials for water supply, purification and sanitation as well as for mid and long term reconstruction.

Strengths of Gaza PCNA approach:

- Rapid and thorough collaboratively developed impact and needs assessment across Gaza directly following conflict cessation
- Jointly prioritized response and recovery activities in three phases: immediate, mid, and long-term
- Coordinated action among international donors and Palestinian stakeholders
- Humanitarian focus by international community and coordination with Israeli government

Project experience also shows that there is a need for task teams to foster connections between returnees and those who have remained in-country during hostilities. The gap between these groups will invariably hinder cooperation between them to the extent that they can have diverging perspectives and hold biases against one another as “inexperienced” or “not knowledgeable” of the challenges and the needs associated with improving water supply and access. Projects have seen that collaboration between these two groups can have combinatorial effects, as locals who remained in-country during hostilities can provide institutional memory, contextual knowledge, and community connections while returnees can provide technical knowledge and good practice from their richer experience in more stimulating and supportive environments. The Bank in one project helped bridge these two groups of professionals and enable them to integratively apply their areas of expertise. This had the near-term benefit of informing the operation in a context with scarce data and capacity, and it had the long-term benefit of enabling the different water professionals to learn from one another about technical and organizational issues of contextually practical relevance.

2.2.4.3 *Build a partnership with a dependable cadre of community facilitators*

While government effectiveness can be dubious in FCS contexts, especially in the case of central government within a socially divided state, a community facilitator can be a useful bridge that helps build local-national authority relationships during the transition to greater stability and peace. TTLs emphasize that linking these two levels is key to fostering perceptions of legitimate policy and infrastructure systems that provide sustainable water access to *satisfied* consumers. Community facilitators, as conduits of practical knowledge, have also augmented state-level capacity development and, when engaged as strategic partners, have helped further the reach of the project under volatile conditions when continuous project supervision is necessary. For example, community facilitators in projects such as Uganda, Sudan and Jamaica helped to bridge local communities and government authorities to improve available service and to manage intra-communal feuding. They also monitored needs and satisfaction with the project and gauged local user responses to equipment breakdowns.²⁴ And in the Rwanda Rural Water Supply and Sanitation Project, Community Development Committees (part of the local government authorities) expanded local water and sanitation planning in consultation with the local population. NGOs, hired as local facilitators by the local governments, proceeded to design projects, mobilize stakeholders, supervise civil works, train water user associations on how to operate schemes or contract local private operators to run the schemes.

2.2.4.4 *Maintain influence by remaining sensitive to the political context*

In FCS contexts, where contentious politics and social division are generally pervasive, the apolitical approach of the Bank can make its initiatives more effective and credible and help the organization build trust with stakeholders. Drawing on this type of influence, Bank teams found that they could successfully mediate between opposing stakeholder representatives within government, which in some projects included unifying opponents by utilizing a consensus model when facilitating public debate and decision-making. The Bank can be seen as a serious, influential, large-scale development partner in FCS contexts. It can be especially appreciated by the client and by beneficiaries in these contexts if it is viewed as having a broad and significant presence in the country or sector. Active engagement of the country director or country manager in framing the Bank's neutral position, particularly when water sector operations are identified by country stakeholders as highly contentious, can be an important component in implementing project operations, meeting timelines, and achieving sector objectives. Conflict escalation, however, can diminish or eliminate altogether the Bank's political clout, with a concomitant effect on operations.

Combining bottom-up and top-down transparent and overlapping approaches can work as a strategic partnership-building endeavor and as "operational insurance" in these tenuous and transitional contexts. One TTL asserted that the task team's investment in a bottom-up approach can incentivize the engagement of central authority stakeholders if they view their government as being in political limbo. Through the implementation of water supply operations the Bank has also successfully helped bridge government back into isolated communities that have been neglected or where investment has not been made due to the poor security situation. Through the Philippines SZOPAD Social Fund Project, for

²⁴ In the Northern Uganda Social Action Fund Project, for example, "community facilitators who are part of government and non-government agencies trained to work intensively with the communities and provide support for the inclusion of other development agencies" throughout the project and sub-project cycle, from identification through implementation and monitoring. World Bank, "Project Appraisal Document: Northern Uganda Social Action Fund Project (Uganda)" (World Bank: 2002), 21.

example, the government engaged with the beneficiary communities on the development agenda, the first such effort after years of conflict and regional insecurity.

TTLs expressed that the utility of the Bank's explicit promotion of project peacebuilding initiatives is ultimately dependent on the particular project and the specific context. A successful example of such promotion was the Mostar Water Supply and Sanitation Project, which aimed to become a "symbol for inter-ethnic reconciliation and cooperation" that could serve as an example in the region.²⁵ Indeed, this effort reunified the ethnically divided Mostar water utility, which was the first public service institutional reunification in post-war Bosnia and Herzegovina. On other projects, however, the review found that explicitly and publicly associating the project with the history of conflict at times perpetuated competitive behaviors among stakeholders and fueled a sense of uncertainty and insecurity among beneficiaries, preempting efforts to envision a peaceful future. Overall, balance in peacebuilding, conflict and development framing is required, and the ultimate determination of this is best assessed by the team when in the field.

2.2.5 *Public Debate and Communications*

This action cluster fosters links between stakeholders in the FCS operations arena, where inter-party division can be a hindrance to achieving project objectives. This includes connecting local communities and government bodies, project implementers and beneficiaries. Enabling open communication helps the project team and champion partners continuously understand evolving conditions, needs and expectations, which define stakeholder relationships and incentives. These action learning activities help inform policy making and project implementation, including associated public relations during transitions out of conflict and away from violence.

2.2.5.1 *Publicly explain project implementation plans and objectives.*

Consultations, like infrastructure, are context-specific. They need to be repeatedly tailored to the political economy dynamics, and there is no perfect operational formula for implementing under-informed infrastructure plans. The misconception that there is such a thing, staff asserted, is a common pitfall when teams do not anticipate the contextual complexity of working in a FCS context. One TTL explained: "We need to *get the right message, and meet the right needs*. This takes extra work from the team."²⁶

FCS contexts are particularly characterized by a lack of trust, which inherently imperils project implementation and can contribute to benefits-related disputes among stakeholders. TTLs who have led water operations in these contexts advise that averting such friction requires the project team and implementing partners to communicate repeatedly and enduringly the project plan, benefits and implementation scenario. They explained that because transitions from conflict and violence are characterized by operational risk, this should go beyond the "usual one or two" consultation meetings, as that process can be exclusive or non-representative and information can be sparse. This means the project

²⁵ World Bank, "Project Appraisal Document: Mostar Water Supply and Sanitations Project (Bosnia and Herzegovina)", (World Bank: 2000), 3.

²⁶ The Northern Uganda Social Action Fund Project used a community needs assessment (CNA) to structure consultations, and in turn both the CNA and the consultations informed project implementation and ensured conflict-sensitivity. The Project Implementation Completion and Results Report explains: "Project preparation was participatory and preceded by a comprehensive Community Needs Assessment (CNA) that formed the basis for further consultations. A number of workshops and consultative meetings were held with local government leaders, civil society organizations, and central government sector staff. Throughout project implementation, consultations continued to capture lessons and adjust implementation accordingly. For example, at MTR [mid-term review], it was found necessary to have more focus on vulnerable youth to mitigate future conflicts" World Bank, "Implementation Completion and Results Report: Northern Uganda Social Action Fund Project (Uganda)," (World Bank: 2009), 6.

team needs to identify stakeholders that require engagement and then establish a forum that ensures continuous and productive representation. During the project concept stage, it was advised, meetings should involve each identified group in one or two sessions. Then, because of volatility in FCS contexts, where projects often need to be adapted over time, multiple meetings should be held over the life of the project. The likelihood of equitable, conflict-mitigating outcomes is improved through repetitive engagements. Meetings should begin with a review of the project plan, implementation progress, community improvements and projected outcome benefits. The selection of data for presentation should inherently consider contentious relationships, screen for the negative influence of project opponents and highlight inter-party collaborative problem solving.

2.2.5.2 Record concerns and manage expectations

As discussed above, operations in FCS contexts require extra patience and flexibility. This is difficult to carry off in unstable or transitional social contexts where there is a sense of urgent need and a genuine sense of frustration when it comes to critical services such as water supply. To deal with this, public consultation meetings should also be a forum where the project team and implementing partners can listen to and address questions, concerns and grievances. This offers communities a means to formulate and structure discussion on the issues they want to raise. Such a component of public communication can serve as an action research process that preempts conflict escalation by enabling informed project adjustments and responses. As was done in the context of the Brazil Uberaba Agua Viva Project, communications can be coupled with open discussion. In that scenario, local stakeholders felt more comfortable about government action and more confident that the investments would meet their needs when the communications process allowed them to engage with authorities. In Brazil this was especially useful in managing expectations associated with timeframes (which shift over the course of implementation as other gaps/challenges are identified) and people having newly moved into the project area.

2.2.5.3 Mitigate misinformation problems through targeted, extended-term public information and consultation exercises

In the context of instability and conflict, communication can be deficient and can confuse issues more than clarify them. During intense periods of transition and recovery, different organizations and representatives might share contrasting or ungrounded information, and gossip and rumors can be pervasive and influential, potentially leading to further social tension. Despite a rigorous “consultation” process, certain stakeholders can be missed because they are not properly targeted or because they enter into the operations context during implementation. Especially in the FCS context, stakeholder engagement – and particularly involving less-powerful groups – needs to be meaningful if tension and violence are to be overcome. Meaning will derive from three dimensions: open-mindedness, security, and trust. Open-mindedness requires building stakeholder perceptions that their ideas and concerns will be heard and addressed. Security requires enabling stakeholders to feel safe in participating. Trust requires facilitating a sense of partnership and equitability. Additionally, while most TTLs interviewed found this difficult to achieve, they advised that new water service stakeholders coming into a project area (e.g., fleeing violence, intimidation and economic difficulty) should be identified by local project partners in real time, and incorporated into communications efforts.

A project in Brazil dealt with this range of communications challenges by setting up community liaison offices in social assistance centers, each staffed by one government official from within the targeted community.²⁷ The TTL referenced this arrangement as a key enabler of the project's success, as it decreased anxiety among community members about access to services and it helped project staff to continuously learn and adapt to changing circumstances. It has also increased local capacity to deal with local society and avoid confusion. The representative holding this office was available at all times to answer questions and manage project-related misunderstandings, which if left unaddressed could have generated animosity and strained relationships between the communities and the government. The central project implementation unit (PIU) supported these offices by disseminating information collected during project monitoring and supervision.

2.2.5.4 Encourage mixed stakeholders to co-lead meetings

Joint leadership of public meetings promotes peacebuilding and the principled benefits of inter-group collaboration where social tensions may have been a previous operational obstacle. Regular town hall meetings over an extended period, such as those that were co-hosted by local government authorities of the previously conflicting ethnic groups under the Mostar Water Supply and Sanitation Project, have for example been proven to be beneficial. In the Mostar case the mayors, representing both ethnic groups, managed the public meetings. This indicated to the public that they were making a joint effort as a united front for change. The mayors used these opportunities to communicate with local users in an integrated way on related key issues of concern to citizens in the city, such as public services, business plans, tourism, and environmental degradation. This integrated approach helped stakeholders on both sides believe that they were not being "sold out" or taken advantage of. Also, this method of joint communication allowed the local leadership to address their constituents directly to explain the benefits of inter-party cooperation and to promote the concept of unifying public services across the municipality.

2.2.5.4.1 Recognize and reconcile traditional and central government authority

The projects explored in this study highlighted that the location of infrastructure can be contentious and can highlight tensions between central government and the communities where operations were focused. This was particularly pertinent in remote locations where traditional systems of authority, which could be especially strong in insecure and isolated environments, and government authority had weakened severely as a consequence of conflict and violence. As Bank operations entered into these locations in partnership with the government client, project teams faced the urgency of dealing with strained relations and the need to reconcile the divergent systems of authority. In the Sudan Water Supply and Sanitation Project, for instance, customary land rights needed to be considered for construction of ponds and the laying of pipes. In the Philippines SZOPAD Social Fund Project, right of way for public water infrastructure required signed and sealed legal agreements and compensation for those who had traditional authority over the land. This project was implemented in an area where national government presence had been nearly non-existent for decades. Whether pipes were buried or laid on the surface, these legal instruments were intended to prevent access problems associated with operations and maintenance, deemed a genuine risk in a war-affected location where distrust and insecurity was high. In Jamaica and Honduras the projects engaged neighborhood leadership as prominent members of local power structures; these were often informal positions accorded to significantly influential local leaders in

²⁷ This method started with Brasilia Environmentally Sustainable Project and has been replicated in the Brazil Uberaba Agua Viva Project and other projects in Brazil. World Bank, "Project Appraisal Document: Brazil Municipal Lending (APL) Program (Brazil)", World Bank: 2007.

poverty-stricken slum neighborhoods where social services were scarce. Strategic communications such as these helped to inform administrative relationships and enable physical planning processes in water and other sectors.

2.2.5.5 *Communicate health risks and mitigation approaches to water users and service providers*

In FCS contexts health risks can be acute, as environmental management often suffers and water contamination increases. These conditions can be associated with a variety of human behaviors, including poor wastewater management. TTLs cited that water operations in FCS contexts have common gaps in environmental and health education to support safe water consumption and sanitary practices through these projects. For example, if a remote water supply source is used both by humans and animals, as were the reservoirs developed under the Sudan Water Supply and Sanitation Project, then human consumers need to be educated on water safety and provided tools and methods to purify water (e.g., fuel for boiling, chlorine tablets, filters). Furthermore, awareness and knowledge of these issues among service providers needs to be elevated to the point that they can consistently assess and respond to water quality and health risks to meet the needs of water users.

2.2.5.6 *Value consumer satisfaction as a peace dividend*

As water services are improved through projects, beneficiaries might perceive inequities, which can strain relations within their communities and service providers and imperil sustainability of services if they are unwilling to pay. In the Mostar Water Supply and Sanitation Project customer satisfaction was a major consideration in improving sustainable water supply under an ethnically integrated utility. To address this, a customer satisfaction survey was carried out to inform the utility's conduct and gauge satisfaction with the services it was providing. The mayors involved in the project area led the effort, which at its core can be understood as a trust-building communications exercise. They convened public meetings from the inception to the conclusion of the survey process, distributed the results, managed public relations, and addressed perceptions of preferential treatment. The mayors also were able to communicate and build buy-in for the city's prioritization of ethnically integrated water services development as a key component of long-term peaceful, sustainable development. They not only made the public aware of physical, technical and financial issues associated with the water sector, but they also pursued the initiative as a meaningful sign of reconstruction and social rebuilding. This process positively elevated the profile of reunifying the first public service entity after the war, and the entire survey process enabled the citizens to communicate their grievances in a structured way. The process also allowed a range of civil society issues to be presented and engaged by authorities. This was by no means as simple endeavor; but it was public and supported the principle of transparency and promoted the importance of broad consumer satisfaction.²⁸

²⁸ Furthermore, "the Customer Service Bureau was founded to ensure sufficient communication between consumers and the utility on a continuing basis through public information and public relations campaigns," World Bank, "Project Appraisal Document: Mostar Water Supply and Sanitations Project (Bosnia and Herzegovina)", (World Bank: 2000), 29.

3. Conclusion

Conducting operations to improve access to water supply in locations affected by conflict, fragility and violence is inherently associated with complex challenges and risks. Furthermore, risks associated with conflict and violence are compounded in locales where access to necessary resources and services is poor, constrained, inequitable, and unsustainable. Development operations in these contexts present the need to be both proactive and reactive in identifying and responding to project and sector challenges and opportunities in FCS environments. In the effort to inform action, this paper puts forward lessons of broadly applicable conflict-sensitive development approaches for water operations. This paper documents operational challenges experienced by a range of project teams, and explores how those have been addressed and how they have demonstrated principles of conflict-sensitivity.

“Conflict” itself is a normal social function that can prompt innovation and change, but it also can manifest perpetual dysfunction, such as crippling social division, inequity, and violence. The diagnosis and action framework items described in this paper can, during the implementation of water supply investments, mitigate these dysfunctions and promote opportunities in the transition from conflict and violence to recovery to long-term development. This analysis explains that conflict-sensitive water supply operations that seek to improve water access can also foster conflict-mitigating sustainable development capacity through certain project design principles and implementation approaches.

This study does not attempt to present global best practice, but rather catalogs water supply operational challenges that have been experienced by some World Bank staff who have been involved in water operations in FCS contexts, and articulates examples of how task teams have addressed those. As the diagnostic framework within the model describes, these challenges are part and parcel to the operations context and arena, and responses to these should be incorporated into operations processes. The action framework, a listing of adaptable conflict prevention and management approaches, has been developed out of the findings and advice shared by Bank task team members who have worked on related projects. In sum, water operations in FCS contexts require well-informed, flexible, interdisciplinary approaches. Experienced staff emphasize that to mitigate dynamics of conflict and violence and enable sustainable social and economic progress we need to understand capacity gaps in these environments – be those between or within organizations and stakeholders or perpetuated by institutions and incentives. Equity-focused response actions should focus on skill-, knowledge- and relationship-building. A conceptual model for analysis and action methods, which can help inform project design, brings additional value to water operations that struggle to manage challenges in transitional FCS contexts. And with these findings as a starting point, an even more comprehensive framework can be developed to guide operations in FCS contexts in a variety of sectors.

Annex A: Project List

List of Projects

Country	Project Name	Project Portal Name	Project Number	Open Date	Close Date	Product Line
Afghanistan	Urban Water Sector Project	Afghanistan Urban Water Sector Project	P087860	May 25, 2006	June 30, 2012	IBRD/IDA
Afghanistan	Emergency Infrastructure Reconstruction Project	Emergency Infrastructure Reconstruction Project	P077779	June 6, 2002	June 30, 2006	IBRD/IDA
Brazil	Uberaba Agua Viva Project	BR Municipal APL1: Uberaba	P089011	March 21, 2007	December 31, 2012	IBRD/IDA
Bosnia and Herzegovina	Mostar Water Supply and Sanitation Project	Mostar Water Supply and Sanitation Project	P057951	June 30, 2000	June 30, 2005	IBRD/IDA
Guinea-Bissau	Multi-sector Infrastructure Rehabilitation Project	Multi-sector Infrastructure Rehabilitation Project	P097975	June 15, 2006	September 30, 2012	IBRD/IDA
Honduras	Barrio Ciudad Project	Barrio-Ciudad Project	P088319	July 7, 2005	June 30, 2012	IBRD/IDA
Iraq	Iraq Emergency Water Supply, Sanitation and Urban Reconstruction Project	IQ-TF Emerg. Water, Sanitation & Urban	P087910	December 3, 2004	December 31, 2011	Recipient Executed (Trust Fund)
Iraq	Iraq Consultative Service Delivery Program	IQ-Iraq Consultative Service Delivery Program	P119740	October 8, 2009	December 31, 2011	Recipient Executed (Trust Fund)
Jamaica	Jamaica Inner City Basic Services for the Poor Project	JM Inner City Basic Services for the Poor Project	P091299	March 29, 2006	December 31, 2011	IBRD/IDA
Kosovo	Pilot Water Supply Project	Pilot Water Supply Project	P070365	December 26, 2000	January 15, 2005	Special Financing
Lebanon	Greater Beirut Water Supply Project	LB-Greater Beirut Water Supply	P103063	December 16, 2010 (Board approval – project not yet under implementation)	June 30, 2016	IBRD/IDA
Liberia	Liberia Emergency Infrastructure Project	Emergency Infrastructure Project	P100160	June 20, 2006	June 30, 2011	IBRD/IDA
Nigeria	Small Towns Water Supply and Sanitation Program Pilot Project	Small Towns Water Supply and Sanitation Program Pilot Project	P064008	May 18, 2000	June 30, 2004	IBRD/IDA
Philippines	SZOPAD Social Fund Project	SZOPAD Social Fund Project	P051386	March 24, 1998	December 31, 2002	IBRD/IDA
Rwanda	Rural Water Supply and Sanitation Project	Rural Water Supply and Sanitation Project	P045182	June 30, 2000	December 31, 2007	IBRD/IDA
Sudan	Sudan Water Supply and Sanitation Project	Rural Water Supply and Sanitation	P100835	October 27, 2006	June 30, 2011	Recipient Executed (Trust Fund)

Country	Project Name	Project Portal Name	Project Number	Open Date	Close Date	Product Line
Uganda	Northern Uganda Social Action Fund Project	Northern Uganda Social Action Fund Project	P002952	July 23, 2002	March 31, 2009	IBRD/IDA
Yemen	Yemen Water Sector Support Project	Yemen-Water Sector Support	P107037	February 24, 2009	August 31, 2014	IBRD/IDA

Annex B: Analytical Tools to Support Development Operations in Locations Affected by Conflict and Violence

A subset of analytical approaches that have supported water operations in FCS contexts are described below. These methods were employed in some reviewed projects and referenced by interviewees as useful in the quest to make operations more conflict sensitive. These analytical processes and products, and associated methods guidance and case study resources, are listed below.

Conflict Analysis Framework

The Conflict Analysis Framework (CAF) is a tool that enables country teams to structure analyses of potential sources and drivers of violent conflict, and their effect on poverty and development at the country level. The CAF is intended to enable conflict-sensitive programming as defined by country assistance strategies (CAS), poverty assessments and other strategy development exercises. It includes a preliminary screening assessment as well as a thorough context analysis methodology. Conflict analyses can be conducted as stand-alone efforts, or as part of large-scale macro-social analyses. The CAF can be employed as a desk study or as a large interdisciplinary field-based effort.

Resources and Case Study

- Conflict Analysis Framework information including method guides is available at: <http://go.worldbank.org/3QZPKY2XU0>;
- Additional information is available in *The Conflict Analysis Framework: Identifying Conflict-related Obstacles to Development* at: <http://siteresources.worldbank.org/INTCPR/214578-1111751313696/20480168/CPR+5+final+legal.pdf>
- Section 3 in *Conflict in Somalia: Drivers and Dynamics* discusses the various impacts of water on conflict dynamics in Somalia: <http://siteresources.worldbank.org/INTCPR/214578-1115363259650/20480154/Somalia+Synthesis+Report+26+January+2005.pdf>

Customer Satisfaction Survey

A customer satisfaction survey is designed to be a tool to assess customer satisfaction with services received in infrastructure development and service delivery projects. It can be an interactive, client-driven initiative to identify customer expectations and inform service improvements. The tool employs standardized individual surveys administered to a statistically representative sample of the population and can be used in mid-term evaluations and in post project assessment. In the Mostar Water Supply and Sanitation Project a customer satisfaction survey was led by the mayors in the project area. The mayors used the exercise as both a trust-building communications exercise, convening public meetings from the inception to the conclusion of the survey process, distributing results, and addressed public concerns.

Resources and Case Study

- The survey method is discussed in Annex 8 of the Implementation and Completion Results Report for the *Mostar Water Supply and Sanitation Project* at: <http://go.worldbank.org/8L060N37X0>

Participatory Rural Appraisals

Participatory Rural Appraisals (PRA) employ local participation develop and assess projects and plans. These methods rely on local knowledge to inform programming and encourage ownership of programs by increasing the transparency of program design and other procedures. These methods incorporate multiple tools including: semi-structured interviewing, focus group discussion, preference ranking, mapping and modeling, and diagramming. In transitional, tenuous, geographically isolated FCS contexts where data and sustainable development knowledge is scarce these methods can simultaneously address both challenges.

Resources and Case Study

- This approach is described in more detail at: <http://go.worldbank.org/AKGNZ7Z4B0>
- Related methodologies using participatory approaches are described at: <http://go.worldbank.org/P8FNP3IB20>
- A community needs assessment was conducted using this method for the *Northern Uganda Social Action Fund*. The method is described in Annex 12 of the Project Appraisal Document at: <http://go.worldbank.org/9OJVKEDJT0>

Post-Conflict Needs Assessment

Post Conflict Needs Assessment (PCNA) is analysis jointly conducted by international community and host-country stakeholders, which assesses the needs of communities, national stakeholders and civil society, and the international community in locations emerging from conflict. PCNA efforts are typically led by national governments with close collaboration among civil society, local community partners and international organizations. The PCNA is designed to assist affected locales in overcoming the impacts of war, prevent renewed violence, and shape short, mid, and long-term recovery prioritization and planning. A PCNA enables the generation of baseline data, gap and needs identification, and can inform emergency aid programs, development investments and national plans, such as poverty reduction strategy papers.

Resources and Case Study

- The PCNA tool kit is described in detail at: <http://www.undp.ps/en/focusareas/crisis/paerмар09.pdf>
- Documentation for multiple tools and frameworks which can be employed in PCNA are found at: <http://www.undg.org/index.cfm?P=1108>
- The methodology employed in the Gaza Post Conflict Needs Assessment is described in Section A of *The Palestinian National Early Recovery and Reconstruction Plan for Gaza 2009-2010* at: <http://www.undp.ps/en/focusareas/crisis/paerмар09.pdf>

Poverty and Social Impact Analysis

Poverty and Social Impact Analysis (PSIA) studies the impacts of public policy choices on stakeholders, with specific focus on the well-being and wellness of poor and vulnerable populations. This methodology is intended to promote evidence-based policy reform by analyzing the direct and indirect impacts of various reform options. PSIA can be used to inform national poverty reduction strategies, specific reform

programs, and donor operations. PSIA can be conducted via desk study and/or in-depth field-based data collection ex-ante or ex-post implementation so as to determine and assess potential impacts of the intervention. This analysis, when it is used to parse conflict systems and dynamics, can facilitate task team understanding of power and benefit structures, and inform conflict mitigation and violence reduction approaches as part of activity implementation.

Resources and Case Study

- A practical guide for implementing PSIA *Tools for Institutional, Political and Social Analysis of Policy Reform: A Sourcebook for Development Practitioners or TIPS* is available at: http://siteresources.worldbank.org/EXTTOPPSISOU/Resources/1424002-1185304794278/TIPs_Sourcebook_English.pdf
- Water Sector Reform in Albania using PSIA is described at: <http://go.worldbank.org/URH3XFJ3T0>
- A searchable database of PSIA case studies is available online at: <http://go.worldbank.org/AA9MAL4PK0>

Public Safety Diagnosis and Community Consultations

Public Safety Diagnoses and Community Consultations assess community security, helping local stakeholders to identify associated infrastructure and service gaps and opportunities for strategic development that enables violence reduction. This approach also provides a benchmark for monitoring and evaluating development project impacts on local communities. These tools were instrumental in the design of the Inner City Basic Services for the Poor Project in Jamaica, which conducted a desk review of government and non-governmental organization statistics on crime and violence, and a community consultation process using focus group interviews and household surveys.

Resources and Case Study

- The methods and strategy of the public safety diagnosis is described in Annex 13 of Project Appraisal Document for the *Jamaica Inner City Basic Services for the Poor Project*: <http://go.worldbank.org/J8164CBX90>

Real Time Evaluation

Real Time Evaluation (RTE) combines qualitative methods including interviewing and observation with quantitative survey methods to continuously inform project implementation, and also to direct the extension of community-driven development pilot initiatives. The World Bank has been conducting a RTE of the Consultative Services Delivery Initiative in the Sulaymaniyah Governorate in the Kurdistan Regional Government (KRG) of Northern Iraq in order to support consultative decision-making processes for resource allocation and service delivery improvement, and to build capacity in the KRG to conduct consultative community development. Among the tools employed in the RTE were focus group discussions, key informant interviews, standard surveys, interviews, observation, and analysis of data sets provided by project staff.

Resources and Case Study

The method and application used in the Consultative Services Delivery Initiative mid-term evaluation are described in Section 3 of:

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