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Doing Things Differently: Can Water Supply, Sanitation, and Hygiene Services Support Peace- and State-Building Processes?

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Interventions across all sectors in fragile states are called to contribute to tackling conflict and fragility despite the lack of evidence on how/if this is possible. This article reviews the existing literature to identify five entry points through which water supply and sanitation service delivery might interact, both positively and negatively, with state-building and/or peace-building processes. Evidence for the relevance of these entry points was assessed in the Republic of South Sudan and the Democratic Republic of Congo. Our research suggests that the way in which water and sanitation services are delivered is more important than the delivery of these services per se. Moreover, we find that the effects are largely modest and likely to be localised, and that greater attention is still needed to avoid potential negative consequences.

Key words: Peace-building, state-building, fragile states, water supply, sanitation

1 Introduction: service delivery, peace-building and state-building

Attention to issues of development in fragile and conflict-affected states (FCAS) has dramatically increased over the past decade, with recent reports highlighting how these countries are the furthest behind in terms of meeting the Millennium Development Goals (MDGs) (World Bank, 2011). Global poverty is increasingly concentrated in these countries and by 2015 half of the world's people living on less than US$1.25 a day will be in fragile states (OECD, 2013). This parallels the trend in the growth of Overseas Development Assistance (ODA) to these countries, with ODA representing the largest financial flow in all FCAS (ibid.).

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In response, international development policies are now asserting that poverty reduction can only be achieved if conflict and fragility are addressed as a core part of development efforts (DFID, 2012). The UK Department for International Development's 'How-to Note' for measuring and managing development results in fragile and conflict-affected states and situations requires that 'all interventions in all sectors in FCAS should contribute to tackling conflict and fragility, as a primary or secondary set of objectives' (ibid.: 25). Among 'interventions' in general, service delivery, and service delivery of water supply, sanitation, and hygiene (WASH), is no exception. Indeed, the New Deal for Engagement in Fragile States includes 'Manage revenue and build capacity for accountable and fair service delivery' as one of five 'Peace-building and State-building Goals' (International Dialogue on Peace-building and State-building, 2011).

The influence of service delivery on peace- and state-building has been increasingly asserted in mainstream international-policy discourse which posits that services, delivered in the 'right' way, can actively contribute to peace and statehood: 'Just as mounting fragility and deteriorating services can be mutually reinforcing tendencies, improving services may enhance social and economic recovery, overcoming fragility in a virtuous upward spiral' (OECD, 2008a: 21). However, the evidence for this presumed relationship is in question: the relationship between service delivery and state-building has been shown to be much more complex, as it is based on the history of state-society relations and discursive and relational aspects of state provision (Mcloughlin, 2014), while the importance of non-state provision in many fragile contexts complicates simple assumptions about expectations and relationships between society and state (Batley and Mcloughlin, 2010). Other research has documented the complexity of peace- and state-building processes, noting how they reflect historical legacies and systemic features not easily shaped by any one intervention and with more relevance for support across sectors such as security and justice (Bennett et al., 2010; Mcloughlin, 2011). More recent literature reviews find that where contributions are asserted in the literature, evidence tends to be anecdotal and there is little in the way of rigorous evaluation that tests the impact of service delivery (and different forms of service delivery) on peace-building and state-building outcomes (Carpenter et al, 2012; Mason, 2013; Ndaruhutse et al, 2011; OECD, 2008a). The scarcity of evidence intensifies when moving from generalities about service delivery to the particular contribution of social services, and then again in moving from social services to WASH in isolation.

Therefore, while there is a strong international-policy discourse that now requires development interventions to demonstrate positive linkages between service delivery and peace-building and state-building efforts, knowledge about, and evidence supporting, specific entry points or mechanisms through which changes in service delivery can shape these broader processes, and on what scale, is still missing.[1] Responding to the current gap in knowledge, and specifically the gap in knowledge amongst WASH practitioners in the field, this article presents the

1. Recent events in South Sudan may force a reappraisal by the international community of the wider peace- and state-building project, including service delivery as a major pillar, as suggested by some commentators (https://www.devex.com/en/blogs/49/blogs_entries/82713?source = MostPopularNews_2).

findings of a one-year research project (January 2012-January 2013) that examined the relationship between service delivery of WASH and wider processes of state-building and peace-building. Specifically, the project examined the WASH interventions of the international non-governmental organisation Tearfund[2] in selected sites in the Democratic Republic of Congo (DRC) and the Republic of South Sudan (RoSS) to understand how (and how far) WASH service delivery might have had positive and negative impacts on these processes.[3]

We stress that the research was not conceived or designed as an impact evaluation, although we do agree that such evaluations are required. Rather, given the current knowledge gaps, the objective of the research was to construct a plausible conceptual framework for assessing potential relationships between these processes (drawing on the theoretical and limited empirical literature); to identify where this framework was evidenced by relationships manifesting in the particular case studies examined; and to identify implications for future research and for programming design.

The article is organised as follows. Section 2 describes the conceptual framework which sets out five entry points through which WASH service delivery might plausibly influence peace-building and state-building processes. Section 3 outlines the research methodology used to assess the validity of the conceptual framework and subsequent entry points. Section 4 provides a brief review of the current state of WASH service delivery in both the DRC and RoSS. Section 5 presents the results of the research, testing the hypotheses inherent in the conceptual framework (Section 2) for how WASH service delivery specifically relates to peace-building processes, with evidence from RoSS and DRC Tearfund project sites. Section 6 presents the evidence documented from Tearfund project sites for how WASH service delivery relates to state-building, and Section 7 summarises our findings, and presents recommendations to international-development policy-makers and practitioners.

2 Potential entry points

In a review of the existing literature, five entry points were commonly identified as ways through which service delivery could have a potential impact on peace-building and state-building processes. These were: visibility, collective action, inclusion,

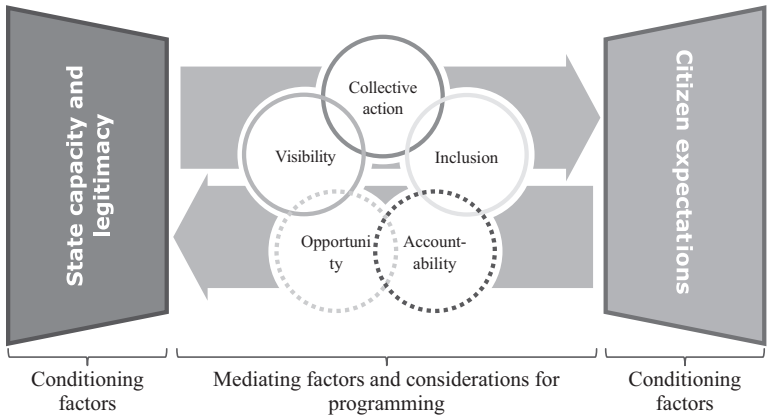
2. Tearfund is a UK-based Christian relief and development agency working with a global network of churches to help eradicate poverty. Tearfund supports local partners in more than 50 developing countries and has operational programmes in response to specific disasters. See www.tearfund.org for more details.
3. It is important to note that working to support these processes was not an explicit objective of Tearfund's WASH programmes, and the research was not an evaluation of these projects. The research focused on Tearfund's water supply, sanitation and hygiene (WASH) interventions implemented through the 'Capacity Building to Improve Humanitarian Action in the Water Sanitation and Hygiene' programme, funded by UK AID, from 2007 to 2012. The objective of the programme was to increase the capacity of Tearfund Operational teams, local partner projects, and local government departments in conflict-affected and humanitarian contexts to support improved access to potable water, sanitation, and public health education (PHE). See http://projects.dfid.gov.uk/project.aspx?Project=113887 for more details of the project.

accountability, and opportunity. These five entry points were identified inductively following a review of the broader literature on relationships between service-delivery and peace- and state-building, both in general and for WASH specifically (Mason, 2013).

The review built on other recent surveys of the assertions and evidence for a 'virtuous spiral' (Haider, 2010; Mcloughlin, 2011; Ndaruhutse et al., 2011), as posited by a range of major development actors (Baird, 2010; DFID, 2012; OECD, 2008a). The contribution of our literature review was a specific focus on WASH services, and an attempt to systematically characterise plausible entry points for supporting the virtuous spiral within a unified framework. The review established that many asserted links had only anecdotal evidence to support them or were based on a limited set of more detailed case studies (for example, Eldon and Gunby, 2009; Burt and Keiru, 2011; Pinera and Reed, 2011).

The framework of the five entry points is shown in Figure 1. In line with the findings of our research (discussed in Sections 5 and 6), the entry points are shown as considerations that are within the influence of decisions on programme strategy and implementation, which might nonetheless mediate between the broader socio-political factors which condition progress towards peace and statehood, such as state capacity on the one hand, and citizen expectations on the other. The entry points are located at the 'micro-level', focusing on the visible linkages between the local experience of service delivery and peace- and state-building processes, rather than visibility at the 'macro-level' socio-political landscape in which service delivery occurs. We return to discuss the differentiation between scale and causal mechanisms in Section 7.

Figure 1: Entry points for WASH service delivery on peace- and state-building processes



Source: The authors.

In practice, much of the policy literature tends to treat peace-building and state-building as interlinked. Our approach sought to separate these two out as distinct processes: while the framework combines possible entry points with relevance to both peace- and state-building effects, some of the entry points

described above can be seen as more relevant to state-building (such as visibility, collective action, and economic opportunities) and others more relevant to peace-building (such as inclusion), while some may be relevant to both, depending on the context (visibility, accountability). This differentiation between peace- and state-building is reflected in this article's presentation of the fieldwork findings in Sections 5 (peace-building) and 6 (state-building).

We provide a brief description of each of these entry points below, which in essence offers five different hypotheses for the ways WASH service delivery might influence peace- and state-building processes. The explanation of these entry points shows, in several cases, that they are far from straightforward and that any attempt to reduce the complex web of socio-political dynamics to five individual concepts is, of course, hugely simplistic. We attempted to keep these subtleties in mind when acquiring and interrogating the evidence from the field research.

First, the visibility of the service provider, whether state or non-state, is a common theme in the literature. The relationships between these are likely to be multi-directional; however, the literature appears to place a greater emphasis on the relationship between improved visibility of services and service providers leading to greater legitimacy and support from citizens. This is related to the OECD's concept of 'output legitimacy' or the World Bank's 'performance legitimacy' (World Bank, 2011), i.e. the perceived effectiveness and quality of services as linked to the state. Obviously, this will be highly dependent on citizens' prior expectations, which are likely to vary within and between services. They may depend on citizens having some basic expectations that the state will act as provider, or at least guarantor or regulator, of services. This has given rise to concerns that modes of service provision which operate outside state structures, relying on non-state providers without even any visible public regulatory oversight, may undermine incipient development of state-society relations because the state is not seen as a provider of services.

Second, collective action and collaboration to provide water and/or sanitation services is highlighted in some of the literature as having the potential to reduce conflict, either between social groups, or between government/residents (OECD, 2008a). This assertion reflects the notion that social capital will be reinforced, for example around collective action, by relying on and developing community structures to prioritise, plan and implement development projects. However, research increasingly shows that forms of participatory approaches cannot be guaranteed to build greater collaboration or contribute to more effective service provision. Case-study analysis points to the importance of supporting collaboration in ways which work with underlying incentives and, in some cases, fostering forms of collective action that encourage contributions from a range of stakeholders, including communities themselves, to improve service delivery (for example, Bano, 2011; Sansom, 2011; Wild and Harris, 2012). Tensions are also identified here between state-building and peace-building. For instance, mobilisation of collective action at the community level linked to peace-building imperatives will be different from mobilisation of collective action between communities and state officials, to support greater trust-building and improved perceptions between these groups as part of state-building. Thus, the purpose of collective-action mobilisation and the stakeholders involved are crucial to final outcomes.

Third, the notion that service delivery can help to mitigate social and political exclusion has also been put forward (Berry et al., 2004). This relies on assumptions that a lack of access to services, or the marginalisation of different groups from accessing services, can further inflame tension and conflict drivers. Thus, improving services – or improving services to particular groups – is seen as a potential way of reducing perceptions of exclusion which can drive future conflict. In recent years, some caveats have been placed on approaches which emphasise inclusion to the extent that they ignore, and thereby risk inflaming, delicate existing power imbalances. The OECD (2008b), for example, has argued that, in some fragile contexts, it may be more important to neutralise powerful interests by working with the grain of existing power and patrimony relations, at least initially. Thus, the aim is less for fully inclusive service delivery, at least initially, but for 'good enough' inclusion in which not to sow seeds for further, future conflict.

Fourth, accountability has been extensively discussed in WASH service delivery generally (Locussol and van Ginneken, 2010). The 2004 *World Development Report* proposed supporting service-related accountability via the 'short route' (direct from citizen, as client, to service provider) where the 'long route' (i.e. from citizens to politicians) is dysfunctional (World Bank, 2004). Baird (2010) argues that the long route is likely to be particularly weak in fragile contexts, thus increasing the imperative to think about possible short routes for service providers and users, while also progressively working to strengthen the long route. This has been taken up by donors and NGOs. For instance, Tearfund programming emphasises accountability as one element in both supporting more positive relationships between citizens and the state (supporting peace-building) and in terms of reducing perceived grievances (linked to local-level peace-building).

While there is a strong policy discourse on the links between accountability and these broader processes, evidence remains mixed as to whether in practice these linkages are apparent (Ndaruhutse et al., 2011). Indeed, accountability of this kind may be particularly challenging for sanitation and hygiene, where demand (and therefore expectation of service providers) may not be manifest until it is 'triggered' by promotion activities – a fundamental rationale for community-led total sanitation. This has not been sufficiently explored in the evidence of accountability to date.

Fifth, there is the extent to which improved services can enhance opportunities for economic participation and disrupt persistent poverty cycles (OECD, 2008a). There would intuitively appear to be a more direct link in the case of financial management and justice services, than in the case of social services. Accordingly, this first group of services is seen as central to 'performance legitimacy', as construed in the 2011 *World Development Report* (World Bank, 2011). Nonetheless, there is research documenting evidence of the economic importance of social services, including WASH. In countries that have yet to attain the Millennium Development Goal (MDG) targets for water supply and sanitation, analysis by the World Health Organization (WHO) confidently estimates the economic returns from sanitation to be at least five times the cost (two times in the case of water) – principally in terms of time savings (c. 70% of benefits for both water and sanitation in all regions) and healthcare savings (Hutton, 2012: 5). We return to reflect on all of these given entry points in the

conclusion, after presenting the findings from the research conducted at the project sites in South Sudan and the DRC.

3 Research methodology

Field research was conducted together with Tearfund staff in South Sudan and the DRC, from March to July 2012.[4] The field research in each country was preceded by a political-economy analysis to understand the key institutions, actors, and incentives towards peace-building and state-building.[5] This included a specific focus on the WASH sector to identify existing levels of collaboration, accountability, legitimacy and capacity of the state. Conflict analysis for each country drew on previously published studies (Autesserre, 2012; Pantuliano, 2004; Pantuliano et al., 2008), and specific locational reports conducted by peace-building NGOs (Search for Common Ground, 2012).

In each country, the research team examined the service-delivery modality (what, who and how) of WASH service delivery in Tearfund project sites through secondary literature (project proposals, annual reports, mid-term evaluation), semi-structured interviews, focus-group discussions, and field-site observations. Research methods used to explore the subsequent relationship between the modalities and peace- and state-building processes were qualitative, relying on non-random samples of opinions, perspectives, and recollection of events according to local community members, local government staff, local NGOs, Tearfund staff, donors, and other sector actors. The sample size is admittedly small because of the limited number of Tearfund project sites examined, and therefore conclusive evidence on the causality between Tearfund WASH interventions and peace- and state-building outcomes is not asserted. Rather, the research methodology was designed to explore the possible range of practical entry points through which WASH service delivery could – in various contexts – plausibly connect to broader processes of peace- and state-building.

In South Sudan, the research project examined five Tearfund WASH interventions in Central Equatoria and Northern Bahr El Ghazal States. In the DRC, the project examined two Tearfund WASH interventions in North Kivu and Maniema Provinces.[6]

4. These countries represented two of the seven Tearfund project sites within their 'Capacity Building to Improve Humanitarian Action in the Water Sanitation and Hygiene' programme, and were selected for the research study based on a combination of programme interest, feasibility (given logistics of access to the site and local communities, security, whether the project was closed or ongoing), and capacity (language skills, prior expertise).
5. Political-economy analysis followed a sectoral, issue-based framework, drawing on those developed by the World Bank and ODI, which covered relevant structural features, relevant institutions and 'rules of the game', and stakeholder analysis (Harris, 2013; Poole, 2011).
6. Selection of project sites in each country was determined by a balance between concerns of: sub-sector focus (looking for a balance between sanitation-dominant vs. water-supply-dominant interventions); ability to physically access the location in relation to ongoing security, transport to remote locations, and weather patterns; and capacity and interest of the local Tearfund office to host and accommodate field researchers. Inclusion of a range of different project experiences, and work with different social groups (hosts, returnees) was a priority, given the exploratory nature of the research to test the validity of all of the potential entry points to peace- and state-building through WASH service delivery identified in the project's conceptual framework.

In both countries, semi-structured interviews and focus-group discussions (FGDs) were held with national, provincial, and local WASH stakeholders within government departments, donors, international and local NGOs, village WASH committees, and local leaders. Observations at each project site were conducted with Tearfund programme staff and community members in order to provide empirical data on the functionality of infrastructure (quality of service delivery was related to potential impact on state- and peace-building processes in our conceptual framework) and determine if the geographic location of the access point was significant for positive or negative impact on conflict issues or community cohesion (discussed in Section 5). In addition, field observations served to validate data received from Tearfund staff on infrastructure location, use patterns, and visibility of any state or NGO presence (signage, symbols), and allowed triangulation of information received through interviews and FGDs on physical conflict around the access point, degree of ownership (conveyed through maintenance standards), and adequacy of provision, given user-population size.

The perceived visibility of the state in the service-delivery process and the degree to which this contributed to a greater sense of state legitimacy were explored through interviews with local community members, government staff, and field observations. Visibility was documented according to presence or absence of state or non-state symbols and signage at the point of access (billboards, plaques, statement of property), in addition to the actual level of engagement of state officials or others with local community members throughout the project implementation process and ongoing operation of the service. Relationship of state visibility to state legitimacy was explored through semi-structured interviews with community members coming from a range of social groups to compare responses across gender and ethnic/tribal affiliations. This was also supported through political-economy analysis of state incentives and sector co-ordination and effectiveness, and discussion with sector actors (other NGOs, donors) to understand the relevance of the history of state-society relations and existing expectations across society concerning what the state should actually deliver in terms of WASH.

Second, we looked for evidence of accountability of the (state/non-state) service provider to citizens and vice versa. Accountability was measured across the research sites according to the responsiveness of service providers to citizens in terms of initial infrastructure design (location, community involvement in selecting water or sanitation technology), ongoing service quality and response to complaints, and documentation of formal or informal contracts between the two parties (agreement, Memorandum of Understanding, contract). Accountability of citizens to service providers was documented according to presence/absence of community maintenance of the infrastructure, and presence/absence of payment for services, if this was part of the project design. Interviews were also used to gather data on perceptions of accountability. This often took the form of open-ended questions, to ask who would be the first point of contact if there were problems with a service, why, what would be the expected response, and so on.

Third, the research looked for the types and degrees of opportunities afforded to residents as a result of improved access to water supply and sanitation services (time savings, economic opportunities). FGDs and semi-structured interviews were

used to explore whether or not opportunities existed, and who was benefiting, and then if this contributed – or not – to increases in state legitimacy or societal stability.

Fourth, the research explored levels of inclusivity in service provision and the relationship between (perceived or actual) discrimination within society and conflict events (this was supported by already documented conflict maps and analysis). Data collected on service-delivery boundaries, and quality of services received across the area and between any existing social groups were compared with information on perceived or actual discrimination through follow-up interviews.

Fifth, the research examined the type of collective action amongst social groups and/or equivalent forms of collaboration between state and society, evident in the service-delivery process and the degree to which this led to greater social cohesion, or perceptions of increased legitimacy of the state. This was mainly gathered through interviews and focus-group discussions, to explore specific examples where collective action had taken place or to understand where and why it had not been possible.

4 The state of water supply and sanitation services: DRC and South Sudan

The DRC and South Sudan offer two very different contexts, with different historical legacies, drivers of conflict and patterns of state-building. They were chosen not as comparative examples, but in order to reflect a range of WASH programming experiences and possible entry points for state- and peace-building. As the wider national institutional environment, existing entry points around state-society relations in the sector, and conflict dynamics in the country shape the opportunities and limitations for modalities of service delivery, we provide a brief overview of the conditions structuring the Tearfund interventions in each country.

Despite the differences between the two countries, there are some similar trends in the WASH sector. First, there are extremely low levels of access to water supply and sanitation. In the DRC, only 40% of Congolese citizens are thought to have access to an improved water source, with significant disparities between rural and urban areas (Ministère du Plan and INS, 2010). The limited financial resources allocated to the sector mean that new facilities are rarely built and existing ones seldom maintained (DRC, 2006). In a country where water resources themselves are abundant, the majority of residents rely on self-supply from unprotected sources (rivers, unprotected wells) with no state involvement in implementation, operation, management, or financing (UNEP, 2011). In South Sudan, there are also huge deficits in water supply and sanitation coverage. Water and sanitation indicators in South Sudan are some of the lowest in the world and the MDG water supply and sanitation targets are distant goals in both rural and urban areas (AMCOW, 2010).[7] While the country has substantial water resources, these are unevenly distributed

7. 2010 data report that only 55% of the population have access to improved sources of drinking water, and 80% of the population does not have access to any toilet facility (http://siteresources.worldbank.org/INTSUDAN/Resources/Key-Indicators-SS.pdf)

across the territory and vary substantially between years with periodic major flood and drought events.

Second, the countries are also similar in terms of a dominance of humanitarian models, large amounts of external assistance, and problems of sector fragmentation and donor co-ordination. This has had important implications in terms of the selection of service-delivery modalities. As humanitarian funding modalities are short-term (rarely longer than one year) and focused on hardware outputs and service coverage (numbers of boreholes drilled, number of people served with water/sanitation), this requires rapid implementation, high managerial and technical capacity for the implementers, and reduces incentives, or ability, to co-ordinate with or work through government channels. While there are now some efforts to transition to different funding models in South Sudan, with more emphasis given to early recovery programming in WASH (Scott, 2013), this is seen as long overdue.[8]

In the DRC, the WASH sector is almost entirely funded by donors (AMCOW (African Ministers' Council on Water), 2010), who remain reluctant to implement projects through government agencies for a variety of reasons.[9] Exacerbating the fragmentation of the sector between government agencies in the DRC is the lack of co-ordination and harmonisation in donor strategies for the sector. In South Sudan, a large percentage (75%) of water-sector financing is provided by donors and much of this funding has been channelled through humanitarian mechanisms and delivered by non-state service providers. While there are some large bilateral-sector donors, overall humanitarian and development assistance has mainly been delivered through pooled financing mechanisms, including for WASH (Kooy and Wild, 2012).

The context of both countries in terms of existing state capacity, as well as citizens' perceptions and expectations for WASH services, are conditioning factors for WASH programming. They are two key dimensions that shape the context for service delivery, and which set the boundaries for choices on programme modalities and approaches. Within the Tearfund WASH interventions, the precise details of what, who and how varied significantly across the four case-study sites and two countries. These range from demand-driven approaches rooted in community mobilisation and engagement (including sensitisation around sanitation and hygiene) as in Central Equatoria, South Sudan, and implementation through a local partner, to more supply-driven programmes largely focused on hardware construction (i.e. boreholes and latrines), directly implemented by Tearfund staff, as in North Kivu, DRC and in Northern Bahr El Ghazal, South Sudan.

In part, these variations in the service-delivery modality visible across the Tearfund project sites reflect some of the underlying contextual factors, and the nature and emergence of state capacity. In Central Equatoria, South Sudan, there has been greater stability, arguably allowing for greater opportunities for longer-term,

8. The UK-led multi-donor Health Pooled Fund (HPF) in South Sudan will contribute £55 million from 2012 to 2016 in order to strengthen government-led health-delivery systems.
9. UNICEF's support for the DRC National Programme of *Village Assaini* is formally a 'government-owned and -implemented' programme, yet the budget for hardware and software implementation for rural water supply and sanitation activities is channelled through partnerships with NGOs, who then take on the responsibility for implementation in tandem with government partners.

community-based engagement. Interviews in the DRC also revealed that choices of programme modalities reflected perceptions of the security and stability of different regions. In practice, however, our analysis suggests that some of these relatively fixed categories (for example, humanitarian/development) may hide realities where both approaches are needed and where responding to immediate need remains an ongoing concern but does not negate the need to also prioritise wider engagement. We reflect further on this, and its implications for peace-building and state-building, in the following Sections. Implications of state legitimacy in relation to selection of service-delivery modalities, while not an aspect of Tearfund project design, are also discussed as an important conditioning factor.

5 WASH service-delivery processes and peace-building

In the Tearfund project sites in both the DRC and South Sudan, access to WASH services *per se* was not a central driver of armed conflict.[10] Main conflict drivers for the DRC include the prevalence of ethnic identities rather than one unifying national identity; competition over land tenure and ownership; regional and international geopolitics (including spill-overs from neighbouring conflicts, relations with Rwanda and so on) (Autesserre, 2011; Gambino, 2011). Main conflict drivers for the Republic of South Sudan include relations with Sudan and historic centre-periphery inequalities, which include natural-resource inequities such as land and water resources for livestock and irrigation. Other conflict drivers are high levels of armed groups or militia; transit and reintegration of returning populations; banditry (including cattle raids) (de Waal, 2007; Pantuliano et al., 2008). This highlights the fact that both countries have a range of historical legacies, systemic features and regional geopolitics which continue to significantly shape the main drivers of conflict, and are not limited to conflicts over (or necessarily shaped by) access to WASH services themselves (see Kooy and Wild (2012) and Kooy and Bailey (2013) for further discussion).

This is an important point. It highlights the extent to which conflict dynamics can be driven by a wide range of factors, many of which may be of a different dimension from basic service delivery. These largely reflect 'macro-level' dynamics. However, at the 'micro level' (or the local level at which users/citizens interact with service providers), as we outline in the following paragraphs, our research did find that the design of WASH interventions is particularly important in shaping whether they have the potential to address intra- and inter-community tensions related to water access and water management, even where the national and regional conflict dynamics associated with armed violence remain outside this scope.

In other words, WASH interventions have the potential to bring communities together around the common goal of increasing access to water and sanitation, and in the process can reduce hostility towards, or resentment between, groups at the

10. This partly reflects the sites selected for fieldwork. In South Sudan, for example, the research team did not visit any programmes based in pastoralist communities where conflict over access to water for livestock has been highlighted by others (MWRI, 2011) and nor did it visit areas characterised by higher levels of water scarcity (i.e. Darfur).

local level. However, as shown in other research as well (Carpenter et al., 2012; Dabo et al., 2010), it was difficult to aggregate these highly localised processes of inter-group engagement with national processes of peace- and state-building. Conversely, our findings in South Sudan (discussed below) illustrate that when not enough attention is paid to the wider context and to conflict drivers, WASH service-delivery projects do have the potential to cause further (localised) conflict.

5.1 Research results on inclusion and discrimination

In the province of North Kivu in the DRC, local military presence was a semi-permanent feature in villages across the Kivus prior to the occupation of the area by the M23 rebel group in May/June 2012.[11] Military camps were using, or appropriating, water points and WASH facilities in the villages without contributing to their construction or maintenance. In response, Tearfund targeted the military for inclusion as a stakeholder group, including senior military representation, in order to secure their buy-in, and for helping to raise issues regarding ongoing maintenance, and local access rules (who gets water first) which had caused tensions related to WASH services with the wider community. In the project-implementation process, military groups were brought in as constructive participants at project workshops and employed as labour to contribute to WASH construction. The process of including the military needed to be handled carefully by local staff, to ensure that the military's authority was appropriately recognised, and there were challenges in the light of the on-going turnover of troops, but including the military within the process of service delivery was reported by village WASH committees and Tearfund staff as reducing tensions over WASH service access between the military and civilians.[12]

However, we also stress that, while there were documented tensions between the military (or militia) and civilians over access to WASH services, this was not a driver of conflict in and of itself. Equal access to WASH services had no impact on either local or regional drivers of conflict (land issues, banditry, civil-military dynamics), which were still prevalent in the area. Therefore, although Tearfund's WASH intervention was able to work within the project to improve the contribution of the military in maintaining water points, there was no evidence of any wider effects on peace-building outside of WASH services. Tearfund's attention to the conflict dynamics in the project area, and designing the WASH intervention to reduce existing tensions between the military and civilian residents, helped, but the intervention was limited – due to the nature of conflict dynamics – in how it could reduce hostility towards, or resentment between, groups to such a degree as to support peace-building.

11. The March 23 Movement, often abbreviated as M23, and also known as the Congolese Revolutionary Army, is a rebel military group formed in April 2012. A peace agreement was signed between the DRC government and M23 in December 2012, but tensions still simmer. For more information, see http://www.un.org/ga/search/view_doc.asp?symbol=S/2013/96
12. Reduced tension over WASH service access was measured according to the decrease in arguments and verbal conflicts between military and civilian wives at the water access points, and an increase in the participation of military wives in maintenance of the standpipe.

In the Tearfund project areas close to the northern border of the Republic of South Sudan, there were also tensions within project sites which spilled over into localised conflicts over access to a range of WASH services. We show below how the way in which WASH services were delivered in these areas was able to mitigate some, but not all, local conflicts over access to water and sanitation.

In the project site in Northern Bahr al Ghazal (NBGL), local conflict dynamics included tensions between returnee and host communities, and between returnee communities and the government.[13] Chiefs in one returnee camp near to the town of Aweil in NBGL complained that 'the government has forgotten the returnee community'. There were also signs of resentment from host communities, evident in the peri-urban community in Nyala district (*payam*),[14] who complained that the returnee communities benefited from various government hand-outs which the host community was not entitled to (food supplies, seeds, basic services). At the Tearfund project site in Majongrak village (NBGL), there were reports of frequent physical and verbal conflicts between returnees and residents in the queue for water at a hand pump in a host community village. This local competition over access to WASH services was combined with wider patterns of perceived discrimination. Local-government district offices (*payams*) were perceived by local village leaders and WASH committees to be directing externally funded WASH projects towards favoured communities.

In response to the existing tensions within and between communities the Tearfund project design specifically focused on involving communities in site selection of the new WASH infrastructure, together with local-government representatives at the p*ayam* level, in order to address perceptions of discrimination. Tearfund also followed a modified demand-led approach, in which villages selected according to needs-based criteria also had to mobilise their own resources (in this case, enough wood to construct a fence barring cattle from entering the water access point). This reportedly helped to ensure community responsibility for the project, and helped to manage perceptions (and address any potential conflicts) over site-selection processes. However, while the provision of water supply in Majongrak (construction of a tube well) did reduce tensions with host villages as a result of increased local access, it did not address wider patterns of perceived discrimination by local government. All the village residents interviewed attributed the decision to build the water point in their village to Tearfund rather than the local government, and FGDs with residents documented their ongoing dissatisfaction with local-government accountability and transparency.[15] While the issue of visibility is more often relevant to the attribution of legitimacy to the state, it is also relevant

13. Tensions between existing residents and returnees are reportedly more prevalent in other States of South Sudan (such as Upper Nile or Unity States), but have also been documented in NBGL (IOM, 2009).
14. *Payams*, and then *bomas*, are the district and sub-district offices of local government, under the County. Decentralisation policies in South Sudan now disperse national budgets directly to local government at the county level.
15. Data based on interviews held with more than 80% of village residents (village population size of approximately 50 households).

to peace-building if conflict dynamics centre on issues of discrimination and exclusion.

5.2 Research results on social cohesion

In other project sites in South Sudan there was evidence of how the process of WASH service delivery was used to support greater collaboration and could reinforce cohesion, for instance by supporting communities to work together or with others to improve service delivery. These results seemed to be most visible when the service-delivery process worked through local partners, or within existing institutions, and within communities which already had some pre-exisiting (though latent) capacity to engage in collaboration.

In areas of Central Equatoria, South Sudan, (a region less affected by security risks at the time of the research but still recovering from legacies of conflict), a demand-driven approach to sanitation and hygiene services was able to foster greater collaboration between and within communities. In the village of Goja, Tearfund's partner organisation (Across) worked through churches in local communities which – given their perceived legitimacy as an institution working for the people (Levy, 2010) – were able to bring together community members to address collective-action challenges and to co-produce water supply, sanitation, and hygiene services. This included new well construction, where community members contributed stone, bricks and sand and a local community-based organisation provided labour and cement, with the involvement of the county government. In the process, interviews suggested that it had built a greater sense of cohesion in terms of community feeling and recognition of shared interests.[16]

Significantly, Across staff focused as much on their engagement with traditional leaders or chiefs at the local level as with church leaders, reflecting the relative strength of chiefs within local communities in South Sudan and within local state structures (see Arnold and LeRiche, 2012). Traditional leaders in these project sites played key roles not just in bargaining and mediation between groups, but also in bringing communities together to take collective action. While there had been localised displacement over the years of conflict with the North, populations had largely returned during the period of the Comprehensive Peace Agreement, implying that existing ties were more easily re-established than in other areas of South Sudan. In addition, due to the

16. Concepts of collective action, co-production and cohesion can be seen as linked, but also refer to different types of dynamic. Social cohesion can refer to the willingness of members of society to co-operate with each other and can be separated into an inequality/exclusion dimension and a social capital dimension (Jenson, 2010), while collective action refers more specifically to voluntary organisation of groups or individuals, to improve the group's overall conditions (Ostrom, 2000). Co-production is less clearly defined, and would refer more broadly to processes through which citizens/users, public officials, service providers and others all provide inputs into the delivery of particular services (Ostrom, 1996). Hence, cohesion is more rooted in notions of exclusion and inequality, as well as social capital, while collective action and co-production refer to more specific ways of bringing different stakeholders together, enabling greater collaboration. The extent to which greater collective action contributes to more cohesion has been less explicitly explored thus far.

prolonged conflict and the location of these villages in the southernmost part of the country, there had been little state penetration because of the internal conflict and secession from the North. This also seemed to have given further prominence to the role of chiefs in these areas. Across staff involved in the WASH programme appeared to be skilled at playing to some of the interests and incentives of these leaders; they were approached first to ensure their support for the process, and appeals were made in terms of their benefits (for instance, in status) from improvements within the community.

These case-study observations reinforce the importance of *the process* for project implementation. Overall, in looking at the ways in which WASH programmes were implemented across both countries, and how this related to the potential impact for peace-building, we found that tensions or conflicts related to WASH service delivery were related to the nature of the programme itself, in terms of how it was delivered and implemented.

6 WASH service-delivery processes and state-building

The DRC and South Sudan offer very different contexts for state-building processes, reflecting very different historical legacies and state dynamics, and significant variance in perceptions of legitimacy and citizens' expectations. In the DRC, various studies have described the state in uniformly bleak terms; it is seen as largely predatory or extractive by its citizens, and regarded as a 'failed state' (Trefon, 2010). This reflects the legacies of former President Mobutu Sese Seko, who promoted a predatory approach where public positions were frequently used for private gain, a pattern which continues today (Trefon, 2009). South Sudan (at the time the research was conducted in 2012) offered a very different context where, with the creation of the new Republic of South Sudan, the government was seen to have greater legitimacy, with higher citizen expectations of what the new country (and its government) would deliver, although there were also concerns to strengthen accountability relationships (ICG, 2011; OECD, 2011). At the same time, high levels of non-state service providers mean that there is limited understanding or awareness of the government's role in service delivery for some sectors (OECD, 2011), which creates potential tensions between mismatched expectations and realities. These two contexts therefore offer very different entry points and openings for considering state-building implications.

6.1 Research results on visibility

For both countries, non-state providers (international NGOs, donors, and local community-based organisations) are viewed as the main providers of WASH services, with all respondents reporting limited or no perception of the role of the state at local levels. This reflects the fact that, in both countries, donor assistance provides the majority of the funding for the WASH sector, and INGOs (or NGOs) have been the primary implementing partners. In both countries, there have been recent efforts to strengthen government oversight and reporting for

NGO-implemented projects, but, for the field sites visited, this does not yet seem to be influencing local perceptions or translating into recognition of changed approaches. While NGOs such as Tearfund reported that they held regular meetings with county-level government and sought its inputs into planning processes, communities themselves did not 'see' this happening and retained an overwhelming perception of NGO activity in delivering services, absent from understanding of the regulatory or oversight role of the state. Residents consistently reported NGOs as responsible for service delivery, instead of any recognition of the role of communities themselves or of some state actors as also having responsibilities.

In one project area in the DRC, Tearfund was reported as the service provider by all interviewees, despite the project's efforts to report to and involve local state agencies. As one respondent stated, 'Who are the government. Who are they? I have never seen them. They have not brought schools or clinics to the village.' While some local leaders in the DRC did recognise that Tearfund projects had the approval of the government, and to some degree its co-operation, the benefits were commonly attributed to Tearfund alone: 'the government shouldn't be providing more development, because then there would only be more corruption. It is better that Tearfund is here.'

Given the context, in which the state is seen as predatory by local citizens (Trefon, 2009; 2010), it is perhaps unsurprising that the state is not seen, or desired, to be visible in WASH service delivery. As one respondent noted, 'We do not depend on the government. The government does nothing. We prefer the NGOs. You see the state of the roads. . . .the government sees this and does nothing.' None of the residents interviewed in these villages attributed the state with the capcity, or legitimacy, to provide services.

Similar trends in terms of state visibility and perceived responsibility were evident in South Sudan, although they manifested themselves in different ways. In the Aweil area, which has experienced more insecurity in recent years as part of the border-region disputes, where there were gaps or problems with provision, villages waited to report to NGOs rather than to the local authorities. However, there were differences between population groups: expectations of the state to provide WASH services were higher among returnee communities than for the host communities (also in relation to the quality/level of services), and not unsurprisingly, there were more negative feelings held towards the state for not fulfilling these functions among returnees than in host groups. This concurs with other research in South Sudan (CfBT, 2012) and probably reflects that many of these communities may have previously received higher-quality services, which has shaped their current expectations.

Within Aweil, where Tearfund is the primary deliverer of the programme, project benefits are clearly credited to Tearfund (rather than to the government) by all village residents. A statement from a host-community resident makes no mention of the government, and highlights the previous absence of services from the state prior to the intervention: 'Before Tearfund came here, we had problems. Previously we were unable to get health services, but Tearfund opened up a clinic. We also have access to clean water. Before, we didn't have medical personnel here but Tearfund has brought

in health workers to train us about hygiene. My life is good thanks to the training from Tearfund.'[17] Similarly, in Majongrak village, the headman stated that he had previously gone to the *payam* office to ask for development assistance, and water supply in particular, but 'there was never anything coming out of this'. The *payam* was perceived as non-responsive to local needs, and the local headman stopped requesting, explaining 'why continue to ask for something that will never come?' Moreover, residents in Majongrak were unclear as to the *payam's* role in approving or determining Tearfund project locations. Thus, even though Tearfund has trained and involved local-government (county, *payam*) actors in conducting site assessments used to select project locations, the benefits of being selected for Tearfund interventions were not, at least in this case, attributed to or linked with state involvement.

In Central Equatoria, where there has been greater security in recent years and growing state capacity at county levels, the benefits of WASH service-delivery programmes were also credited to non-state providers (largely INGOs or NGOs), rather than to communities themselves or to state actors who should have some formal responsibilities. All respondents interviewed identified non-state providers (often referred to generically as 'NGOs' by communities) as their primary source of assistance for service delivery; where there were gaps or problems with the provision identified, villages reported that they would 'wait for NGOs to visit' rather than reporting to local authorities at *payam* or county level.

Some of these dynamics may reflect the nature of the WASH sector, which has been less of a priority for the South Sudan government than, for example, education (which has particular state-building imperatives as well). However, again the visibility of NGOs is a relevant issue. Moreover, while the need to brand projects and be visible on the ground is often linked to the perceived need to be accountable for projects, our research highlighted a perceived lack of accountability despite this visibility. Questions were raised by communities in parts of Central Equatoria as to the accountability or responsiveness of these non-state providers. This is not a criticism directly levelled at Tearfund's programmes in the area, but it provides an important backdrop. In Goja, there were reports of four boreholes drilled by other NGOs in the vicinity but clustered in areas difficult for local populations to access, and with a lack of consultation with communities about their siting. This was a common problem in many of the local sites, suggesting that visibility does not equate to greater accountability unless sufficient measures are perceived to have been taken to consult and work with local stakeholders.

What emerges from these findings, unsurprisingly, is the importance of context when making decisions on how to address visibility issues. In a context like the DRC, it is not currently appropriate for an NGO like Tearfund to focus on strengthening the visibility of the state at local level, because that state is already viewed as predatory by its own citizens. Instead, there may be greater scope for building communities' own sense of agency. In a context like South Sudan, however, where there is a new state and where (at the time of the analysis) there was scope for supporting greater efforts at trust-building and collaboration between citizens

17. http://www.tearfund.org/en/news/sudan/how_we_are_helping_communities/

and local state officials, then NGOs would have a role to play in strengthening the visibility of the state at local levels. This might involve clear communication of the role of the state as regulator or overseer of services or through visible signs of joint delivery (public officials accompanying NGO staff).

6.2 State-building and state-society relations

As highlighted above for the DRC and RoSS, the dominance and visibility of NGOs as service providers can potentially undermine strengthening the capacity of state institutions.[18] While many non-state providers make significant contributions to addressing WASH needs, less attention has been paid to consideration of the potential trade-offs in terms of who is associated with service delivery and who is held to account for the delivery of services. At the same time, in both South Sudan and the DRC, accountability relationships between state and society remain constrained, and are still emerging in the case of the new Republic of South Sudan. This means that there are twin imperatives, both to build up the institutional capacity of the state and to strengthen accountability relationships over time. Evidence from both countries suggests that this needs to be anchored on feasible, realistic approaches which build on local norms and institutions.

In both countries, efforts to mobilise a range of stakeholders (state and non-state) to work collectively to address WASH gaps at local levels were effective in both addressing chronic service-delivery problems and supporting constructive relationships between different stakeholders (with potential state- and institution-building implications). This suggests that rather than supporting a particular model, for example of accountability, greater efforts could be spent in brokering and facilitating local problem-solving between stakeholders. This might be part of a process of supporting accountability relationships over time, which begins with forms of trust-building and socialising to bring different groups together.

Interviews in the villages in South Sudan indicate that using a community-mobilisation approach helps to build a greater sense of local agency, rather than dependence on external support.[19] Concrete examples were identified in villages where the project approach used helped to address perceptions of responsibility and helped communities themselves to address chronic collective-action problems ranging from the management of sanitation facilities to the construction and maintenance of new infrastructure. Approaches that brought in government actors among other stakeholder groups to contribute to the production of services (not only WASH) seemed to be particularly effective.

While the DRC offers a much more constrained context for these processes, some examples were identified where community-mobilisation strategies had included key state actors at the local level. In one project site the Tearfund local partner (PPSSP) explicitly included state actors, in this case heath-zone workers, who were seen as key

18. This is defined as the 'capacity conundrum' by WSP (2011a; 2011b).
19. The Church and Community Mobilisation Process (CCMP) has been developed by Tearfund and applied in a variety of different religious communities worldwide. See Tearfund (2012) for more information.

influencers on sanitation practices.[20] Some positive outcomes of this were put forward by PPSSP staff, particularly in one district where a local health officer had been fining households for poor sanitation facilities and withholding the funds, but changed this behaviour as a result of the Tearfund project.

How to connect community-level initiative to a wider sense of collective action still remains a challenge. In a village in Central Equatoria, South Sudan, one of the hygiene monitors stated: 'We are not so much bothered with government, especially with the current government, Across has opened our eyes to be self-empowered.' This attitude may mean that the benefits of collaboration remain located at the level of the individual community, rather than spilling over into their relationships with others, including local state actors. Where these types of initiatives focus only on mobilising the individual village or community involved, therefore, they may miss other opportunities to develop further links.

Undoubtedly, however, this needs to proceed in an incremental and realistic manner, which recognises capacity constraints on the ground. In many of the government offices visited in South Sudan, for instance, significant constraints were identified, including where the actual offices (at county levels) were newly constructed and lacked resourcing for transport, fuel and other supplies, as well as limited staff training and skills, to enable effective monitoring, oversight and participation by state officials. There was also a lack of policy coherence, where the mandates for WASH services were not yet clearly defined and creating confusion as to which government departments should play a lead role.

Opening up possibilities for engagement in 'state and society building' would therefore need to proceed carefully, particularly in the light of the potential incentive problems on all sides. These constraints suggest the need to identify some realistic entry points for incorporating greater (and more visible) roles for a range of stakeholders, including local state actors. In South Sudan, there may be increased demand on government services to repair bore holes, as in Central Aweil where broken boreholes were followed by requests for assistance to the *payam* and county government. This could provide one useful entry point for greater state-building engagement, and non-state providers implementing WASH programmes could sensitise communities in terms of their own responsibilities for service provision, and help broker contracts or agreements between communities and state actors to co-produce or collaborate around certain services. In a context like the DRC, however, this will necessarily be more constrained, and it may be inappropriate to support strengthening the visibility of the state.

7 Doing things differently, not just doing different things

We identified five potential entry points or mediating factors through which *how services are delivered* seems to interact with state-building and peace-building processes, namely, visibility, collective action, inclusion, accountability and

20. PPSSP stands for Programme de Promotion des Soins de Santé Primaires (Programme for the Promotion of Primary Health Care).

opportunity. Our research revealed that not all of these factors will provide entry points in every context or on every scale (micro, macro level); this is where forms of conflict and context mapping are needed to strengthen understanding of the local environment and potential issues to be considered in programming choices. The first three (visibility, collective action and inclusion) were more prominent as entry points in South Sudan and the DRC; for the other two (accountability and opportunity), the evidence base is currently weaker and there were fewer examples to draw from based on our case-study analysis.

Our case-study analysis highlights the need for continued debates on the positive and negative relationships between service delivery, peace-building and state-building. International-development policy needs to become more grounded in local realities of how services are delivered and experienced, rather than grand claims and assumptions that particular dynamics will be replicated across different contexts. Our research findings also highlight that, in order for interventions to combine peace-building and state-building goals with WASH service delivery, there is a need to 'do things differently' (World Bank, 2011). Based on the case studies in the DRC and South Sudan, we argue that more focus has to be placed on *how* WASH programmes are delivered at the local level: not only what services are provided (piped water vs. borewells, sanitation hardware vs. hygiene promotion), but who provides them (for whom), and how they are provided (supply-driven vs. demand-led; participatory planning vs top-down implementation). This is particularly important if we seek to create positive local experiences (of users/citizens) in services, and in local processes of state-building and peace-building, which was the focus for this research.

We conclude from our case-study analyses of the projects in South Sudan and the DRC that it is precisely the what, who, and how questions which substantially shape how any potential gains for local-level peace-building and/or state-building play out. The broader context of existing conflict dynamics, and both citizens' perceptions and expectations, and of the nature and emergence of state capacity and legitimacy, should therefore be viewed as conditioning factors for WASH programming. These are key dimensions that shape the context for service delivery, and set the boundaries for choices on programme modalities and approaches.

However, we stress that it is unrealistic to expect that these dynamics can be remade by a single WASH intervention. In practice, the degree to which non-state providers are able to facilitate changes in state-society relationships also depends on the incentives and capacity of the state institutions, as well as practical implications of the project timeline and duration of engagement. This reinforces the call for more adaptable, nuanced approaches that can take account of the non-linear nature of the humanitarian-development transition. It is likely to require funding modalities and programme approaches that build this in explicitly.

In conclusion, our research findings highlight a considerable need to assist practitioners in identifying specific, grounded, and realistic approaches to strengthen *how WASH programmes are delivered* in fragile states so that they take much better account of peace- and state-building processes. This also requires setting realistic and feasible expectations for WASH services in terms of how they can contribute to

wider processes of state-building and peace-building and the need to differentiate the scale on which we expect these outcomes to accrue (micro vs macro).

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References

AMCOW (African Ministers' Council on Water) (2010) *Water Supply and Sanitation in the Democratic Republic of Congo: Turning finance into services for 2015 and beyond*. Nairobi: Water and Sanitation Program.

Arnold, M. and LeRiche, M. (2012) *South Sudan: From revolution to independence*. London: Hurst & Co.

Autesserre, S. (2012) 'Dangerous Tales: Dominant narratives on the Congo and their unintended consequences', *African Affairs* 111(443): 202–22.

Autesserre, S. (2011) '"The Trouble with the Congo: A Precis", Book Symposium on "The Trouble With the Congo"', *African Security Review* 20(2): 56–65.

Baird, M. (2010) *Service Delivery in Fragile and Conflict Affected States*. Background paper for *World Development Report*. Washington, DC: World Bank.

Bano, M. (2011) 'Negotiating Collaboration in Pakistan', *Public Administration and Development* 31(4): 262–72.

Batley, R. and Mcloughlin, C. (2010) 'Engagement with Non-State Service Providers in Fragile States: Reconciling state-building and service delivery', *Development Policy Review* 28(2): 131–54.

Bennett, J.; Pantuliano, S.; Fenton, W.; Vaux, A.; Barnett, C. and Brusset, A. (2010) *Aiding the Peace: A multi-donor evaluation of support to conflict prevention and peace building activities in Southern Sudan 2005–2010*. Hove, UK: ITAD Ltd.

Berry, C.; Forder, A.; Sultan, S. and Moreno-Torres, M. (2004) *Approaches to Improving the Delivery of Social Services in Difficult Environments*. PRDE Working Paper 3. London: Department for International Development.

Burt, M. and Keiru, B. J. (2011) 'Strengthening Post-conflict Peace-building through Community Water-resource Management: Case studies from Democratic Republic of Congo, Afghanistan and Liberia', *Water International* 36(2): 232–41.

Carpenter, S., Slater, R. and Mallett, R. (2012) *Social Protection and Basic Services in Fragile and Conflict Affected Situations: A global review of the evidence*. Working Paper 8. London: Secure Livelihoods Research Consortium, Overseas Development Institute.

CfBT (2012) *Synthesis Research Report: State-building, Peace-building and Service Delivery in Fragile and Conflict-affected States*. London: CfBT Education Trust. Available at: http://www.cfbt.com/research/clientcommissionedint/statebuilding.aspx (accessed 13 March 2013).

Dabo, A.; Salmon, J.; Venancio, M. and Keuleers, P. (2010) *Local Governance, Peace Building and State Building in Post-Conflict Settings*. UNDP Discussion paper. New York: United Nations Development Program.

de Waal, A. (2007) *Sudan: What kind of state? What kind of crisis?* London: Crisis States Research Centre, London School of Economics.

DFID (2012) *Results in Fragile and Conflict-Affected States and Situations: How-to note*. London: Department for International Development.

DRC (2006) *Poverty Reduction and Growth Strategy Paper*. Kinshasa: Democratic Republic of Congo.

Eldon, J. and Gunby, D. (2009) *States in Development: State building and service delivery*. Final Report. London: HLSP.

Gambino, T. (2011) *World Development Report Background Case Study: DRC*. Washington, DC: World Bank.

Haider, H. (2010) *Topic Guide Supplement on Statebuilding and Peacebuilding in Situations of Conflict and Fragility*. Birmingham: Governance and Social Development Resource Centre, University of Birmingham.

Harris, D. (2013) *Applied Political Economy Analysis: A problem-driven framework*. London: Overseas Development Institute.

Hutton, G. (2012) *Global Costs and Benefits of Drinking-water Supply and Sanitation Interventions to Reach the MDG Target and Universal Coverage*. Geneva: World Health Organization.

ICG (2011) *Politics and Transition in the New South Sudan*. Africa Report 172. Washington, DC: International Crisis Group.

International Dialogue on Peace-building and State-building (2011) *A New Deal for Engagement in Fragile States*. Paris: International Dialogue on Peace-building and State-building, Organisation for Economic Co-operation and Development.

IOM (2009) *State Report Northern Bahr el Ghazal, Village Assessment & Returnee Monitoring*. Geneva: International Organisation for Migration. Available at: http://www.iom.int/jahia/webdav/shared/shared/mainsite/activities/countries/docs/village_assessment_northernbahr.pdf (accessed 23 June 2012).

Jenson, J. (2010) *Defining and Measuring Social Cohesion*. Social Policies in Small States Series No. 1. London: UNRISD (United Nations Research Institute for Social Development) and the Commonwealth Secretariat.

Kooy, M. and Bailey, S. (2013) *Tearfund WASH Service Delivery in DRC: Contributions to peace-building and state-building*. London: Overseas Development Institute.

Kooy, M. and Wild, L. (2012) *Tearfund WASH Service Delivery in South Sudan: Contributions to peace-building and state-building*. London: Overseas Development Institute.

Levy, A. (2010) *Southern Sudan at the Crossroads: Citizen expectations, aspirations and concerns about the referendum*. Washington, DC: National Democratic Institute.

Locussol, A. and van Ginneken, M. (2010) *Template for Assessing the Governance of Public Water Supply and Sanitation Service Providers: A tool for understanding water system effectiveness*. (https://openknowledge.worldbank.org/handle/10986/11701) (accessed 7 Februrary 2012).

Mason, N. (2013) *Relationships between Water Supply, Sanitation and Hygiene (WASH) Service Delivery and Peace-building and State-building: A review of the literature*. ODI Working Paper 362. London: Overseas Development Institute.

Mcloughlin, C. (2014) 'When Does Service Delivery Improve the Legitimacy of a Fragile or Conflict-Affected State?', *Governance* doi: 10.1111/gove.12091.

Mcloughlin, C. (2011) *Topic Guide on Fragile States*. Birmingham: Governance and Social Development Resource Centre, University of Birmingham.

Ministère du Plan et l'Institut National de la Statistique (2010) *MICS RDC 2010 Survey. Preliminary Results*. Kinshasa: Ministère du Plan in collaboration with UNICEF.

MWRI (Ministry of Water Resources and Irrigation) (2011) *Water Systems for Mitigating Water Resources Based Conflicts*. Concept Paper. Paul Mayom Akec, Minister of Water Resources and Irrigation, Government of South Sudan.

Ndaruhutse, S.; Ali, M.; Chandran, R.; Cleaver, F.; Dolan, J. and Sondorp, E. (2011) *State-building, Peace-building and Service Delivery in Fragile and Conflict-affected States*. London: Practical Action Consulting, Save the Children, and CfBT Education Trust.

OECD (2013) 'Ensuring Fragile States Are Not Left Behind: 2013 Fact sheet on resource flows and trends'. (www.oecd.org/dac/incaf/factsheet%202013%20resource%20flows%20final.pdf) (accessed 20 December).

OECD (2011) *2011 Report on International Engagement in Fragile States: Republic of South Sudan*. Paris: Organisation for Economic Co-operation and Development.

OECD (2008a) *Service Delivery in Fragile Situations: Key concepts, findings and lessons*. OECD/DAC Discussion Paper. Paris: Organisation for Economic Co-operation and Development.

OECD (2008b) *Concepts and Dilemmas of State-building in Fragile Situations: From fragility to resilience*. Paris: Organisation for Economic Co-operation and Development.

Ostrom, E. (2000) 'Collective Action and the Evolution of Social Norms', *Journal of Economic Perspectives* 14(3): 137–58.

Ostrom, E. (1996) 'Crossing the Great Divide: Co-production, synergy and development', *World Development* 24(6): 1073–87.

Pantuliano, S. (2004) *Understanding Conflict in the Sudan: An overview*. Washington, DC: World Bank.

Pantuliano, S.; Buchanan-Smith, M.; Murphy, P. and Mosel, I. (2008) *The Long Road Home: Opportunities and obstacles to the reintegration of IDPs and refugees returning to Southern Sudan and the three areas*. Report of Phase II: Conflict, Urbanisation and Land. London: Humanitarian Policy Group, Overseas Development Institute.

Pinera, J. F. and Reed, R. (2011) 'Restoring Services, Rebuilding Peace: Urban water in post-conflict Kabul and Monrovia', *Water International* 36(2): 222–31.

Poole, A. (2011) *Political Economy Assessments at Sector and Project Levels: How-to note*. Washington, DC: World Bank. Available at http://www.gsdrc.org/docs/open/PE1.pdf.

Sansom, K. (2011) 'Complementary Roles? NGO-government relations for community-based sanitation in South Asia', *Public Administration and Development* 31(4): 282–94.

Scott, R. (2013) *Sustainable WASH Interventions as Population's Transition from Relief to Development: Developing a framework for strategic analysis and planning*. OFDA Project Report. Loughborough: Water, Engineering and Development Centre, Loughborough University.

Search for Common Ground (2012) *Conflits Majeurs et Recommendations: Liste des conflits majeurs et recommandations rapportés dans les conflict scans PEAR+*. Goja, DRC: Search for Common Ground.

Tearfund (2012) *Umoja Church and Community Mobilisation Process: An overview*. Teddington, UK: Tearfund.

Trefon, T. (2010) 'Administrative Obstacles to Reform in the DRC', *International Review of Administrative Sciences* 76(4): 702–22.

Trefon, T. (2009) 'Public Service Provision in a Failed State: Looking beyond predation in the DRC', *Review of African Political Economy* 36(119): 9–21.

UNEP (2011) *Water Issues in the Democratic Republic of Congo: Challenges and opportunities*. Technical Report. Kinshasa: United Nations Environment Program.

Wild, L. and Harris, D. (2012) *The Political Economy of Community Scorecards in Malawi*. London: Overseas Development Institute.

World Bank (2011) *World Development Report 2011: Conflict, security and development*. Washington, DC: World Bank.

World Bank (2004) *World Development Report 2004: Making services work for poor people*. Washington, DC: World Bank.

WSP (Water and Sanitation Program) (2011a) *Pathways to Progress: Transitioning to country-led service delivery pathways to meet Africa's water supply and sanitation targets*. AMCOW Country Status Overviews, Regional Synthesis Report. Nairobi: Water and Sanitation Program, Africa Region.

WSP (Water and Sanitation Program) (2011b) *World Bank Water and Sanitation Program*. Report from workshop on Delivering Water Supply and Sanitation in Fragile States, Nairobi, 3-5 May. Nairobi: Water and Sanitation Program - Africa Region.