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## **Participation and Power Dynamics Between International Non-Governmental Organisations and Local Partners: A Rural Water Case Study in Indonesia**

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**ABSTRACT:** Community-Based Management (CBM) is an important part of Indonesia's goal of universal access to water. However, approaches to CBM tend to neglect the impact of power relationships between community-based organisations (CBOs) and their external donor partners on CBO management capacity. This paper explores the power dynamics between a CBO and their donor partner, the international NGO Engineers Without Borders Australia (EWB), in a rural water supply project in Tenganan, Indonesia. A diffracted power frame was used to analyse the response of CBO power to EWB's participatory approach. The approach was sensitised to power, gave primacy to the CBO's vision, used local assets, and had a flexible timeline. The CBO's power was evident in the strength of its vision, its resistance to government involvement, the occasional rejection of technical advice from EWB, and its increased confidence in its capacity to manage Tenganan's water supply. The findings reinforce the political nature of participation, with implications for approaches to establishing CBM in Indonesia and elsewhere. Strengthened outcomes in rural water supply are likely to result from greater self-reflection by external partners regarding their own positionality, coupled with a focus on strategies for maintaining and enhancing the power of CBOs.

**KEYWORDS:** Rural water supply, power, participation, community-based management, Indonesia

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### **INTRODUCTION**

This case study of a rural water project analyses the shift of power of an Indonesian Community-Based Organisation (CBO) in response to the participatory approaches of an International Non-Governmental Organisation (INGO). It then discusses how this shift impacted the water management efficacy of the CBO.

The Government of Indonesia (GOI) aims to achieve universal access to water supply by 2019. It is expected that 60% of this access will be delivered through CBOs (Al'Afghani et al., 2015) in an approach called Community-Based Management (CBM). CBM refers to participatory approaches that extend local participation beyond the planning process of Rural Water Supply (RWS), to its ongoing management.

Since the 1990s, the GOI has supported CBM through funding and regulatory support (BAPPENAS, 2003; Sy, 2011; Al'Afghani et al., 2015). INGOs and multilateral organisations such as the World Bank also have a history of supporting CBM in Indonesia, thereby supplementing the efforts of the Indonesian government. The most current of such projects is the Indonesia – Third Water Supply and Sanitation for Low Income Communities (PAMSIMAS) Project, a collaboration between the GOI and the World Bank. PAMSIMAS has reportedly provided an improved drinking water supply to over 10 million people and has targeted over 20 million people to be reached by 2020 (World Bank, 2017a). Despite the scale of CBM in Indonesia, there is limited national data on the water supply coverage that is provided by CBOs. It is estimated that there are approximately 25,000 CBOs in Indonesia (Robinson, 2012, cited in Kasri et al., 2017), which provide water to 10% of Indonesia's 250 million people (Kobayashi et al., 2014). To meet the GOI's targets, therefore, a significant increase in the number, coverage and sustainability of CBOs is required.

Despite the expansion of CBM in Indonesia, its effectiveness is under increasing scrutiny. There are concerns about sustainability of service, with many questioning the ability of CBOs to effectively deliver and manage RWS (see, for example, Harvey and Reed, 2007; Chowns, 2015; Whaley and Cleaver, 2017). This paper uses a case study in rural Tenganan, a village in Bali, Indonesia, to highlight the importance of the power dynamics between implementing INGOs and their CBO partners, and the role this has in supporting effective community management of RWS. The Tenganan Water Supply Project (referred to hereafter as 'the project') was implemented between 2005 and 2010 by a local CBO called Unit Pengelola Sarana Air Bersih (UPSAB), which translates as 'controllers of the clean water infrastructure', and was supported through a partnership with the INGO Engineers Without Borders Australia (EWB).<sup>1</sup> Before the project began in 2005, RWS in Tenganan was poor. UPSAB was poorly organised and inspired little confidence from its users (Bowen, 2006; EWB TAN, 2008). EWB's role was to provide technical and capacity development support to UPSAB to improve its management capacity and the quality and quantity of water.

This paper explores EWB's novel approach to participation which was explicitly sensitised to the power dynamics between EWB and UPSAB. Its approach included the priority use of local assets, a flexible project timeline, and the primacy of UPSAB's own vision of RWS over that of EWB. The findings indicate that a participatory approach is not power neutral; this case study found that the participatory approach supported the agency and power of UPSAB members. This in turn contributed to the improved management capacity of UPSAB within and beyond the partnership, as evidenced by the completion of major works by UPSAB between 2015 and 2017, independent of EWB support.

The literature review in the second section of this paper briefly explores decentralisation in Indonesia, the CBM model, and typologies of participation and power. The background to the case study and the management challenges of UPSAB are then provided, followed by a description of the methods used in this paper. The subsequent section provides an analysis of the power relationship between UPSAB and EWB in relation to the latter's participatory practice, and the effect of this power dynamic on UPSAB's capacity. The paper concludes with recommendations for INGO practices.

## **COMMUNITY-BASED MANAGEMENT, PARTICIPATION AND POWER**

### **Decentralisation in Indonesia**

Rapid decentralisation in Indonesia began in 1998 following the fall of President Suharto's New Order regime. Within a year, decentralisation reforms had taken place representing a "quiet revolution to the countryside" (Antlöv, 2003: 200), characterised by increased village-level autonomy and responsibility. In

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<sup>1</sup> EWB Australia is an Australia-based NGO founded in 2003. It supports social change programmes in Australia and internationally, within the context of the engineering discipline.

the course of the reforms, village affairs were separated from the authority of higher levels of government, and space was provided for village-level planning and implementation of development activities (Antlöv et al., 2016b). This provided a stark change to the uniformity that had been imposed under the New Order,<sup>2</sup> where national stability and economic development were sought through central government control of village governance and development (Antlöv, 2003).

The introduction of 'Village Law' into Indonesian legislation in 2014 further extended the process of decentralisation. These recent changes have been accompanied by significant budget allocations supporting village-led development. Although the full impact of these reforms is still uncertain (Antlöv et al., 2016a), they have provided further opportunity for autonomous management of village-level affairs, which includes water management.

An important legacy of Suharto's regime has been the establishment of *gotong royong* (mutual assistance) in the Indonesian psyche as a 'moral fact' (Mardiasmo and Barnes, 2015). *Gotong royong* has been variously interpreted as labour exchange and general reciprocity. It has been used as a tool to mobilise village-level cooperation on development initiatives. However, critics have argued that the concept had been co-opted by the state to include a model of 'good citizens' who were expected (and often forced) to contribute labour and resources to development projects (Bowen, 1986; Mansuri and Rao, 2012). Both *gotong royong* and decentralisation of governance structures have provided a philosophical and practical rationalisation for the adoption of participatory approaches to development in Indonesia, including village-level management (CBM) of water supply, which is discussed in the following section.

### **CBM and the demand-responsive approach in Indonesia**

In the 1980s, as with other forms of development in low income countries, it was acknowledged that many top-down RWS projects were failing. Low RWS coverage, limited confidence in, or support for, the state, and the rise of participatory approaches led to a shift in responsibility for RWS management and maintenance to community end users (Katz and Sara, 1997; Harvey and Reed, 2007; Lockwood and Smits, 2011; Moriarty et al., 2013). This was the beginning of CBM. Since the 1980s, CBM has been the predominant RWS approach used by INGOs and donors in low income countries (Harvey and Reed, 2007; Lockwood and Smits, 2011). This includes Indonesia, where CBM was mainstreamed through the Water Supply and Sanitation for Low Income Communities Project in 1993 (Kasri et al., 2017). CBM represented a shift of responsibility to users from INGOs or government actors and the potential to scale water supply in rural and remote areas.

In line with global trends, from 2000 onward Indonesia adopted a Demand-Responsive Approach (DRA) to underpin the CBM model (Kasri et al., 2017). With the introduction of DRA, communities were to receive the RWS services they wanted. The community's demand was communicated via participation in activities that elicited their input into the type, location, and management system of their RWS. Community demand was also indicated via their contributions of materials, labour and finances to put this infrastructure in place. Theoretically, DRA prevented water systems from being built in communities where they were a low priority (Kleemeier, 2000).

Despite the popularity of the integration of CBM and DRA, there are arguments for their separation. Demand-responsive RWS programmes were seen as necessary for service sustainability and such programmes ensured that equitable and relevant systems were installed, while the contribution of CBMs to sustainable services was questionable (Katz and Sara, 1997; Harvey and Reed, 2007). Such critiques have led to calls for alternative models to supplement or replace CBM including private sector or public

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<sup>2</sup> The legacy of the New Order had implications for UPSAB's desire for independence from the government, this is discussed in a later section.

sector supply, or self-supply. However, despite criticisms, DRA and CBM remain the dominant approach to RWS in Indonesia, and globally in low income countries.

### **Sustainability challenges of community-managed water supply**

Despite the proliferation of the CBM model in developing countries, it has proved to be far more challenging to maintain and operate RWS infrastructure than to construct it (Harvey and Reed, 2007; Lockwood and Smits, 2011; Schweitzer and Mihelcic, 2012). It is estimated that, on average, 20 to 40% of RWS systems globally are not functional or do not deliver a sustainable service (Lockwood and Smits, 2011).<sup>3</sup> No accurate information on the sustainability of CBM RWS in Indonesia was found as part of this paper. However, a World Bank survey (Sy, 2011) of 600 CBOs in East and West Java found 1 in 4 to be defunct, indicating that Indonesia's experience may mirror global trends.

The high failure rate of CBM has led to questions about its future. Literature on CBM reforms, which included community management plus and service delivery approaches,<sup>4</sup> tend to frame CBM as a "techno-managerial exercise" (Whaley and Cleaver, 2017: 57), and focus on changes to institutional arrangements of RWS. The work of the World Bank (World Bank, 2017b) provides one such example. The Bank reviewed 'good practice' in RWS service models across 16 countries, including CBM, private sector, self-supply, local government, and public utility. It identified a suite of characteristics important for RWS sustainability across dimensions of institutional capacity, financing, asset management, water resource management, and monitoring and regulation. Such findings pointed to the complex system needed to support various forms of RWS, which includes CBM.

Although we recognise the value of institutional support for, and reforms of, CBM, we posit the power dynamics between external agencies who support RWS and their partner CBOs as an important but neglected consideration for future approaches to CBM. We are in agreement here with Whaley and Cleaver (2017: 63) who described the influence of power dynamics on CBO operations, and have called for "approaches that extend the analytical gaze (...) to understand how social relations, and especially power relations, operating within and between different scales of organisation come to bear on local management efforts". While acknowledging that governments and private sector entities also engage in CBM, this paper focuses on power relations between an INGO (Engineers Without Borders) and a CBO (UPSAB). This is explored in the next section.

### **Participation in community-based management**

The dynamic between implementing INGOs and CBOs is inherently political. The relationship may be characterised by different and competing agendas including contestation over decision-making power and over the resources contributed towards RWS programmes (Narayan-Parker, 1995; Mansuri and Rao, 2004, 2012; Prokopy, 2005; Whaley and Cleaver, 2017). Overtly, this relationship between INGOs and CBOs is often mediated by the INGO's approach to participation (Narayan-Parker, 1995; Mansuri and Rao, 2004, 2012). Although the implications of participation and power have received significant criticism in the general development literature (Pretty, 1995; Cleaver, 1999; Cooke and Kothari, 2001; Cornwall, 2008; Mansuri and Rao, 2012), there has been limited analysis of power in CBM within the RWS literature (Whaley and Cleaver, 2017).

Although CBM includes a diverse range of approaches adopted by INGOs, typical participatory approaches in CBM may include involvement of CBOs in decision-making on the type, level, location and governance of the RWS system as well as the community's contribution of material, labour and cash.

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<sup>3</sup> Lockwood and Smits (2011: 24) define service sustainability as an "indefinite provision of a water service with certain agreed characteristics over time".

<sup>4</sup> Further detail on community management plus and on service delivery approaches can be found in Hutchings et al. (2015) and Lockwood and Smits (2011), respectively.

Such approaches are often referred to as providing a 'sense of' or 'feel of' ownership, and are a necessary precursor to local participation in the ongoing operation and maintenance of a RWS by a CBO. In cases where such participatory activities are driven by INGOs, this is referred to as 'induced' participation as opposed to 'organic', the latter being driven independently and internally by a community (Mansuri and Rao, 2012). Since those creating participation spaces are more likely to have power within it (Gaventa, 2006), a layer of complication emerges when attempting to support ownership and associated decision-making power in CBOs, in an atmosphere where ownership is often viewed as something to be 'handed over' to CBOs.

INGO agendas may also inhibit the level of control and ownership by CBOs. INGOs' upward accountability to donors to meet timelines, budgets and predetermined results can skew the investment and the approach to participation (Neely and Walters, 2016). These potentially competing agendas have implications for the level of decision-making and control, or power, that CBOs possess.

The power dynamics inherent to participation more generally were described in Arnstein's (1969) seminal 'ladder of participation', which provides a useful metric to qualify participation types across a spectrum from tokenistic (informing, consulting or placating citizens) to participation at the level of citizen power (delegated power by citizens and/or direct citizen control). White (1996) has built on Arnstein's work, differentiating what participation means for the implementer and the participant based on their different motivations and agendas. White (ibid) defined four types of participation which, for the implementer, include nominal (for display), instrumental (for means such as efficiency), representative (for voice) and transformative (for empowerment). Such nuance is usually absent in references to participation, and the spectrum that Arnstein and White proposed offers a somewhat sombre reflection on the use and abuse of the term, highlighting the diversity of "form, function, and interests within the catch-all term [of] participation" (ibid: 7).

Although the focus of this paper is on the relationship between an INGO and a CBO, we acknowledge the political and power dynamics within communities as being significant in determining the level and types of participation within that community. Moriarty et al. (2013) and the Rural Water Supply Network (RWSN, 2010) assert that the implicit assumptions of community cohesion, and their willingness and ability to form institutions and volunteer time to manage RWS services, are 'myths' and are based on an idealised, culturally based notion of rural communities (Harvey and Reed, 2007; Moriarty et al., 2013). The general term 'community' disguises the diversity of groups, relationships, agendas and power within place. This diversity has considerable implications for participation, particularly when dealing with contested resources such as water. For instance, inequalities based on gender (see, for example, Carrard et al., 2013; Mommen et al., 2017), age, caste or class within place may influence the ability of people to participate in decisions relevant to water (Mansuri and Rao, 2004; Gaventa, 2006). INGO approaches to participation can lessen, maintain, or, in extreme cases, worsen such inequalities, hence participatory approaches need to be sensitised to such internal power relations if they are to provide voice and choice for all, not just for a select elite.

The following section expands on concepts of power as a precursor to the analysis of participation and power in the case study.

### **Concepts of power**

Power is often considered to be centralised and embedded in structures, where the powerful are those with resources and expertise who control the powerless (Gaventa and Cornwall, 2008; Kabeer, 1999; Cahill, 2008). In such a scenario, there are winners and losers, and empowerment means moving power from the centre using tools such as participation (Kabeer, 1999). This conception of power is often featured in rights-based approaches and grassroots-participation discourses which seek to shift the balance of power from the powerful (usually the state) to the powerless (Batiwala, 2007; Winterford, 2016).

Influential writers such as Foucault have provided a more complex view of power. His post-structural approach viewed power as not possessed by any single actor but rather embedded in discourses, relationships and practices in daily life (Foucault, 1991; Gaventa, 2003; Wong, 2003; Cahill, 2008). Hence, from Foucault's perspective, power was both pluralistic, fragmented and not necessarily oppressive – it could also be productive and positive (Gaventa, 2003). Foucault's thinking has influenced more-nuanced conceptualisations of power today, including within development literature. However, his articulation of power has been critiqued for its neglect of concepts of personal power (i.e. changes in consciousness or power within), a feature of more contemporary approaches to power in the development arena (Rowlands, 1997).

Foucault noted that "where there is power, there is resistance" (Foucault, 1978, cited in McGee, 2016: 107) and scholars such as Scott (1985) have built on the interplay between power and resistance. Scott described everyday acts of resistance and tactics of noncompliance in a Malaysian village (for example, false compliance and feigned ignorance) that were a response to power in the form of domination (power over). Scott's work provided the foundation for a growing body of literature which examines resistance as the power to exercise agency (McGee, 2016) and, according to Gaventa (2003), consideration of resistance is now a necessary component of any contemporary approach to power analysis.

Contemporary frameworks of power have attempted to capture its diverse manifestations. These tools have emerged since the early 2000s from both feminist and power-structure research (McGee, 2016). This has included consideration of various forms of power such as collective action or 'power with' others, as well as those alluded to earlier: 'power within' (a personal sense of power); 'power over' (the capacity to override the sense of agency of others), and 'power to' (productive forms of power). Together, the four typologies of power (over, with, within and to) have been adopted in several power analyses (see, for example, Kabeer, 1999; VeneKlasen and Miller, 2002; Gaventa, 2006) and are increasingly part of the power lexicon in development literature.

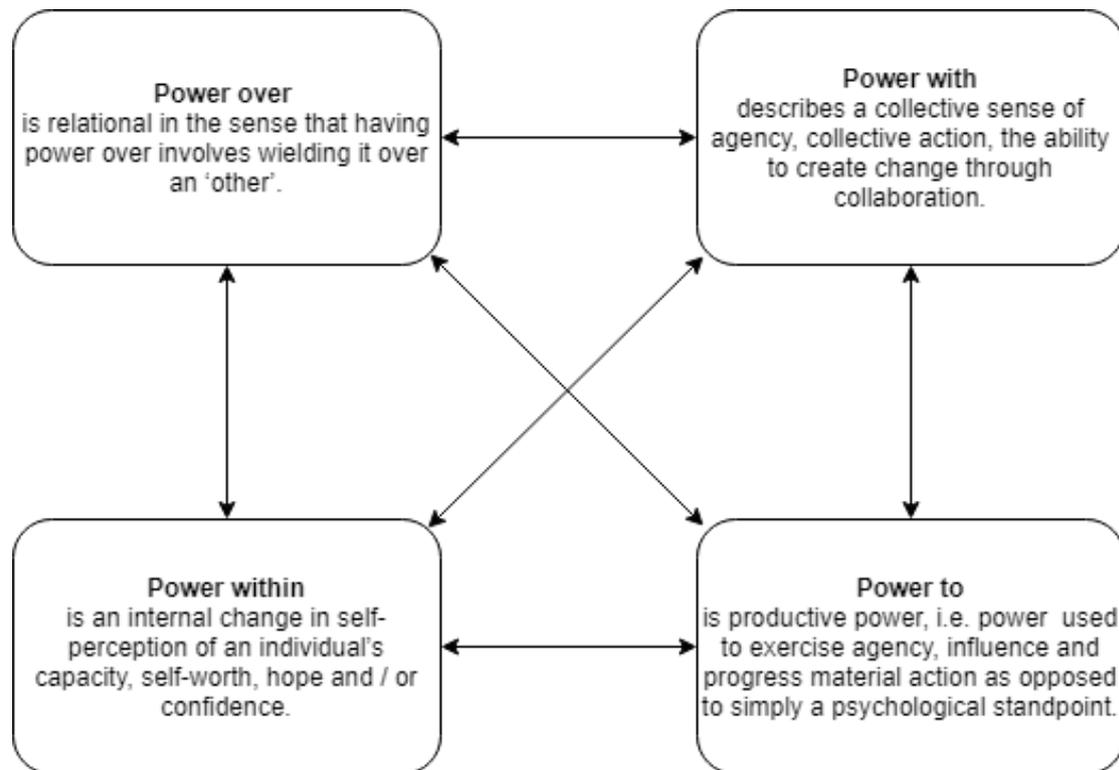
Wong's work provided a useful framework of the typologies, shown in Figure 1 below. The arrows indicate the dynamic nature of the typologies; that is, power types can coexist and change in space and time. Wong (2003: 311) captured some of the complexity of power in the development context when he described power as being

not necessarily negative, destructive or repressive. It may be productive and generative. Power may be both covert and overt, visible and hidden at the same time; therefore, we may not consciously recognize its existence, but we produce and reproduce power through discourses. The control of power may not necessarily be governed by physical, economic and social strength, but by socialization and social practices.

Wong, like other power scholars (e.g. Kabeer, 1999) often has avoided reducing power to a single definition and instead embraces its fuzziness and contested nature. We have also deliberately avoided a specific definition of power, and instead refer to the range of typologies shown in Figure 1. Note, where the term 'power' is used in the general sense in this paper it refers to changes in power across all four dimensions. While admitting that the lack of a specific definition introduces some ambiguity, we see this as reflective of the complex forms and manifestations of the notion of power.

Further, power analysis has become increasingly complex and explores not only typologies but also "realms (public, private, intimate), levels (household, local, national, transnational, global) and forms or faces (visible, hidden, invisible)" of power (McGee, 2016: 104). Although these classifications provide further tools for defining where and how to engage with power, this paper focuses on typologies only as defined by the power lens. A final note is that, while acknowledging the value and importance of power, it is important to recognise that such terms and descriptions are in most cases an externally imposed label as opposed to language used by participants at the centre of development initiatives.

Figure 1. Diffracted power lens.



Source: Image adapted from Wong (2003: 310), definitions from VeneKlasen and Miller (2002) and Gaventa (2006)<sup>5</sup>.

## CASE STUDY BACKGROUND

This section outlines the background to the case study and the challenging social-cultural-technical environment that UPSAB operated in.

### Existing water supply system and conflict

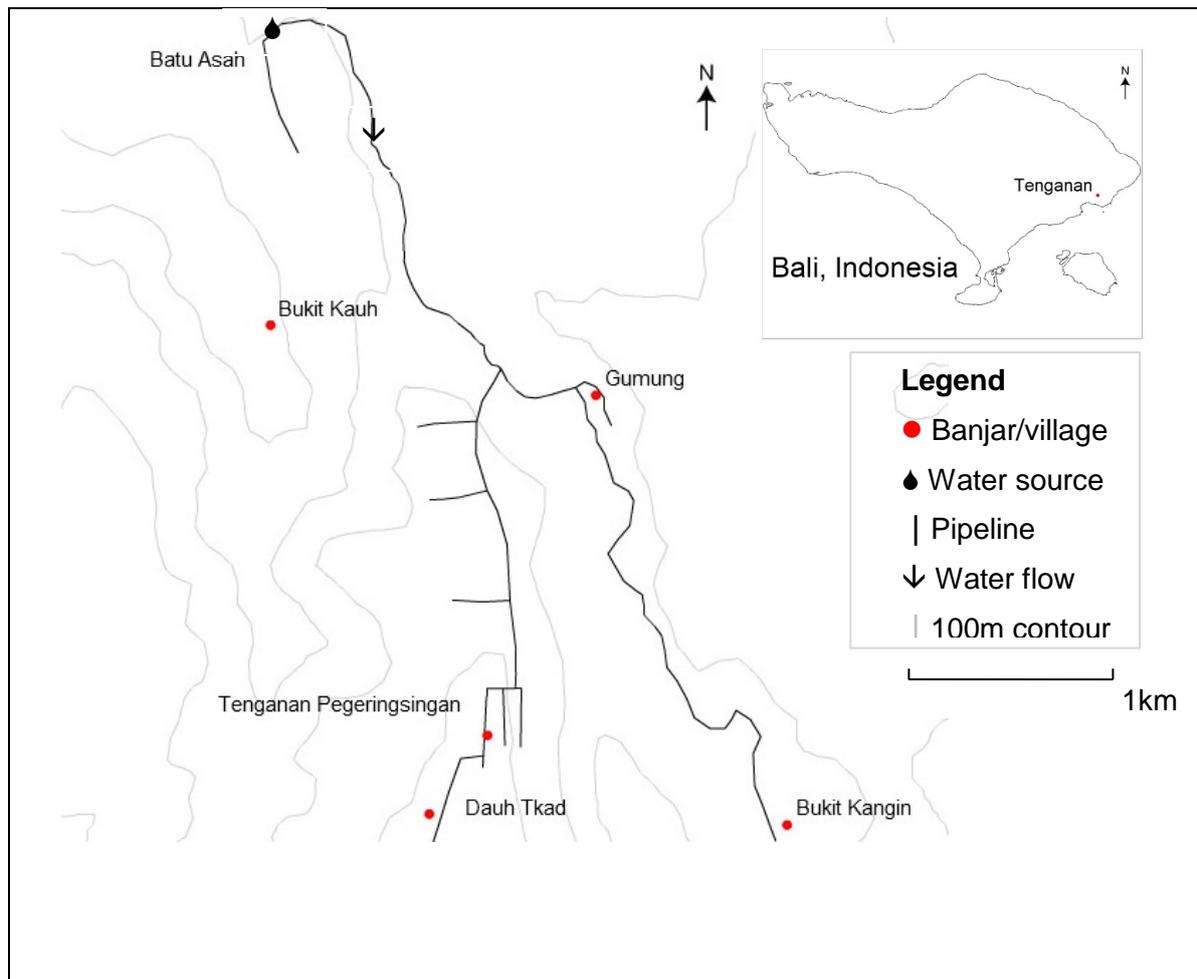
*Desa* Tenganan (Tenganan village) is a rural village of approximately 4000 people located within the Karangasem region of eastern Bali, Indonesia. **Error! Reference source not found.** shows its location, which covers over 1500 hectares. Tenganan is divided into five government-defined sub-villages called *banjar*, which include Tenganan Pegeringsingan, Tenganan Dauh Tkad, Gumung, Bukit Kauh and Bukit Kangin.

The Tenganan community historically accessed water from a variety of sources including the nearby Buhu River, springs (including an important local spring called Batu Asah), a limited number of private wells and household rainwater systems. The most significant GOI project to improve water supply was the Batu Asah distribution network constructed in the 1980s.<sup>6</sup> It is the primary water source for most citizens of Tenganan, and UPSAB had responsibility for its management.

<sup>5</sup> Wong (2003: 310) refers to the framework as "[t]he feminist multi-dimensional and dynamic analysis of power"; we have adopted the 'diffracted power lens' as used by Mathie et al. (2017).

<sup>6</sup> Other government interventions included rainwater tanks installed in the mid-2000s in Bukit Kangin and Bukit Kauh. These regions were not serviced by the 1980s Batu Asah project.

Figure 2. Tenganan's existing water distribution network.



Karangasem is the driest region of Bali, and Tenganan regularly faced challenges in accessing consistent and clean water, particularly in the dry season. The limited reach of the Batu Asah pipe network and the absence of control valves and water meters, combined with UPSAB's poor management, meant when water was available it was poorly allocated. Additionally, in accessing water the banjars had unique challenges related to their relative locations. Issues highlighted by users and UPSAB included:

- Variable distances to travel for water collection (up to two hours in some locations);
- Higher population density and low supply at downstream locations;
- Uncertainty of supply, water being diverted and cut off without notice;
- Long waiting times at tap stands;
- Unequal distribution of water between banjars; and
- Water infrastructure land tenure/access issues.

In addition to domestic use, water played a critical role in both livelihoods and religious ceremonies in Tenganan. Water supply disruption mid-ceremony was one of many frustrations reported to the lead author by users. There were multiple incidents of water-related conflict within Tenganan that were further compounded by weak traditional and formal governance linkages between banjars (Bowen, 2006). Examples of such conflicts included:

- Negative perceptions of government involvement in water supply;
- Mistrust between villages, for example residents of Tenganan Pegeringsingan accused those upstream in Gumung of deliberately stealing their water;
- Rumours of water being poisoned and vandalism of water systems; and
- Hostility and lack of confidence in the efficacy of UPSAB.

It is clear that this backdrop was far from the Western cultural ideal of a homogenous and cohesive community setting (Harvey and Reed, 2007; RWSN, 2010). Any decisions and participatory processes to improve water supply and management were inherently political. Against this background, UPSAB began working with EWB on the Tenganan Water Supply Project in 2006, with the goal of improving water management and service. Further details on UPSAB are elaborated on below.

### UPSAB background and project aims

The core group of UPSAB consisted of a chairperson and four committee members. In addition, five to ten members from each banjar supported planning decisions and coordinated banjar-related infrastructure work when required. Although occasional cash or food compensation was provided to core members, UPSAB was typical of most CBOs in that it was essentially run by volunteers. UPSAB responsibilities included all aspects of water management such as allocation, maintenance and system improvements. In theory, water fees were to be collected by each banjar chief and passed on to UPSAB. In reality, fee collection, maintenance, repairs and UPSAB meetings were on an ad hoc basis. As observed by Bowen (2006: 62), "by all indications, this [water] committee had not met in years, and any repairs of the system had been organised and paid for by the *perbekel* [office of the village chief]".

UPSAB's lack of power and its self-identified poor management contributed to its ineffectiveness. The complex social and political dynamics described above, the lack of political influence of the desa system (which included UPSAB) compared to traditional governance structures, and poor infrastructure made the management of RWS difficult. Users reported frustration with the RWS and lack of confidence in UPSAB. Despite this challenging background, among the leadership of UPSAB there was evidence of a demand for an improved RWS service and a desire for change. This demand was articulated by the UPSAB chairperson in a 2008 interview:

Question: What change would you like to see from the project?

UPSAB chairperson: The change I hope to see from this project, first is the well managed water. Because right now it is really unmanaged. And also with the good management I hope that people in Tenganan will have sense of belonging to the system and they will do care, not like they do right now. And also with this system there will be openness between the [U]PSAB as a management organisation to the people so they can inform whatever to the people regarding maintenance and so on.

EWB support for UPSAB included volunteer technical staff that were seconded to UPSAB between 2005 and 2010. This was typically one or two engineers for periods of up to 18 months during the scoping, design and construction phases of the project. EWB held most of the responsibility for the design of 'engineered' infrastructure. Additional support included technical design, capacity development in the form of project management, operational and maintenance support (see Third et al., 2008), and linkages to donor funds for some capital works.

Project aims were developed by EWB and UPSAB following scoping and data collection in 2005 and 2006 (EWB TAN, 2008). These aims were:

- Increasing the quantity of water supplied through the distribution network such that there would be sufficient continuous water supply for current and future populations;
- Improving the quality of the distributed water; and

- Increasing the community's capacity to maintain and sustain their water infrastructure.

Power and empowerment were not explicitly described in EWB's design approach; however, it is implicit in the third aim mentioned above and was designed for through EWB's capacity development activities and participatory approach, which aimed to ensure the participation of UPSAB in all stages of the project.

EWB's approach was framed by their Strength-Based Approach (SBA) development philosophy (EWB TAN, 2008). A SBA is a philosophical stance which views people and place as rich in resources or strengths which can be highlighted and harnessed to create change. A practitioner's role in an SBA is primarily that of a facilitator rather than an expert (Willetts et al., 2014). Although SBAs have also been codified to a set of tools through practices such as Asset-Based Community Development (ABCD) (Kretzmann and McKnight, 1993; Mathie et al., 2017) and Appreciative Inquiry (Cooperrider and Srivastava, 1987), for EWB, SBAs remained a philosophical framework for guiding EWB's approach to participation and interactions with UPSAB, which included attempts to "build on existing capacities rather than imposing new ones" (EWB TAN, 2008: 59). Aspects of EWB's approach are described further in a subsequent section.

## RESEARCH DESIGN

This section describes the project documentation reviewed for this case study and the diffracted power lens that was used to analyse the power dynamics of the case.

### Methodology

EWB worked with UPSAB between 2005 and 2010. The lead author was seconded by EWB to work full-time with UPSAB for 18 months in 2007 and 2008. This was a period of intense interaction which included both work with UPSAB and participation in social and cultural activities within Tenganan. During this period, the lead author built personal relationships and trust with UPSAB and community members.

The majority of primary data for this research was collected between 2007 and 2008. It included observations from the lead author, 14 interviews with UPSAB staff and banjar leadership, 5 focus group discussions (FGDs), survey data from women's groups in each banjar, project photos, location and system maps, and UPSAB and village governance meeting minutes. The interviews were completed by the lead author or the UPSAB project manager. These interviews and FGDs were not collected for the purpose of this paper but formed part of the project learning and organisational records for both EWB and UPSAB; however, the content of the interviews was assessed as relevant as it included reflections on the observed changes in UPSAB capacity and RWS infrastructure, the nature and reasons for participants' involvement in the project, and reflections on the partnership with EWB. The lead author also recorded observations from follow-up visits with UPSAB in 2012 and 2015, and an interview was held with the new UPSAB chairperson in 2018 as an additional data source for this paper. Approval to use interview data was granted by participants.

Secondary data, namely historical project documentation, was also analysed for this paper. This included baseline engineering and anthropological studies, monitoring and evaluation reports, and engineering design reports. All data was analysed to determine the nature of EWB and UPSAB's partnership, EWB's participatory approach, changes in UPSAB's power and capacity, and how this manifested in RWS management changes.

The analysis was concerned with the dynamic nature of UPSAB power and its evolution in the context of the partnership with EWB. Hence, the diffracted power lens described earlier in this paper was used to interrogate the range of power types and dynamics at play in the case study and the subsequent changes in UPSAB power. The power lens has been used by VeneKlasen and Miller (2002) to analyse power in the politics of participation, and by Cahill (2008) and Mathie et al. (2017), who used the

diffracted power approach to explore power dynamics associated with strength-based livelihood programmes.

### **Limitations**

There are several limitations to this research. Most interviews were completed by the lead author, and it is likely that the power and cultural distance between the lead author and the participants shaped responses. Additional limitations include the limited number of UPSAB members and the language barrier between participants and the lead researcher (who had only basic Indonesian language skills). The two UPSAB members who were most involved with the partnership also spoke the most English, and they therefore provided a greater amount of the interview data. It is also likely that the views of the core UPSAB team differs from those more peripherally involved, as exemplified later in this paper with regard to the longer timeline preferred by the UPSAB management team, which was considered to be a burden by users and banjar leaders.

These limitations have been mitigated through several approaches. First, use of open interview questions enabled participants to shape the direction of responses. Second, multiple data sources, where available, have been used to provide variable perspectives and confirmation of participants' responses. Third, the embedded nature of the lead author allowed rapport to be built and observations to be collected over an extended period of time. Finally, within the scope and available space of this research, it was not possible to have a comprehensive analysis of the additional facets of power described earlier in the paper (i.e. realms, levels and forms/faces of power). Instead, the focus was on the typologies of power at the local level between the INGO and the CBO. Further limitations encountered in the use of the power lens are described in the following section.

### **ANALYSIS OF PARTICIPATION AND POWER**

The power lens described earlier in this paper was used to delineate the various forms and functions of power with respect to EWB's participatory approach. We first elaborate here on the participatory approaches which inhibited UPSAB's power, before describing those which had a positive impact. The section concludes with a reflection on the utility of the power lens.

#### **Negative power relations**

EWB's participatory approach did not always support the power of UPSAB. Examples include formal capacity development activities (i.e. training) which sought to improve the skills of UPSAB and their 'power to' manage the water system. When such training lacked immediate relevance for UPSAB, these approaches often failed. For example, proactive training of UPSAB staff in water quality sampling and testing, although appreciated by UPSAB members, was not applied in practice. The training had minimal or no impact on UPSAB capacity or 'power to' complete water quality analyses.

The absence of a gendered approach to participation was also a failure of EWB's participatory approach. The project did little to change women's influence on, or contribution to, water management in Tenganan, and UPSAB was and remained a male-dominated organisation. EWB initiated consultation with women via the women's group Pemberdayaan Kesejahteraan Keluarga (PKK, Family Welfare Movement) with UPSAB support. However, the scale and substance of gendered participatory approaches was limited to information-sharing and consultation with PKK members at isolated moments rather than engaging them in meaningful decision-making (Arnstein, 1969; Pretty, 1995). EWB's failure to challenge the lack of female involvement is likely to have further entrenched the existing gender inequalities in water management. The benefits of women's participation in improving the efficacy of RWS systems is well documented throughout the literature (see, for example, Willetts et al., 2010;

Carrard et al., 2013; Foster, 2013; Mommen et al., 2017), and the failure to explore opportunities for women's participation and influence in the project was therefore a significant missed opportunity.

UPSAB's relationship with the government had historically inhibited their power to manage water effectively. 'Power over' is how power is traditionally thought of – the domination of one party over another. UPSAB members were cautious of state power over water infrastructure and over UPSAB's decision-making power. As Bowen (2006: 26) noted, "[UPSAB] informants expressed concerns that any solutions to their water supply that involved the government had to be carefully considered so that the government did not procure existing water sources". The chairperson therefore resisted and rejected support from Perusahaan Daerah Air Minum (PDAM), the local government utility responsible for drinking-water systems. The perceived state 'power over' CBOs was not unique to Tenganan. Suharto's New Order regime of the 1990s saw community resources such as water being taken over by the state. In addition, current legal regulations in Indonesia which determine rights and operations for CBOs are vague and conflictual, increasing the potential for tension between CBOs and PDAM (Sy, 2011; World Bank, 2011; Al' Afghani et al., 2015).

The 1980s government water project in Tenganan also shaped UPSAB's negative experiences of participation. UPSAB members recounted being informed about the government project but having very little active participation in it. This perpetuated distrust of government, and the inadequacies of the project resulted in substandard infrastructure. It was also a missed opportunity to build capacity and confidence within UPSAB. The UPSAB chairperson and project manager expressed a desire to do the Tenganan project differently, to be "not like the government project" and to be involved from its formative stages.

Although UPSAB had initiated the project with EWB, EWB held power over UPSAB through its access to donor funds and through being perceived as the water experts. UPSAB members were consulted and had approved the design, however, the technical design process was initially led by EWB and UPSAB had limited capacity to engage meaningfully. This was further compounded by language barriers between EWB and UPSAB staff.

Despite these examples of 'power over' UPSAB, it was by no means powerless. Cahill (2008), describes the false dichotomy between the – ostensibly – powered and disempowered parties. Contemporary theories of power (discussed above) allude to the variability of power in time and space. This was certainly the case for UPSAB. For example, UPSAB's own 'power within' and 'power over' government was evident in their confidence and ability to resist government involvement, and in their 'power to' exclude it. Further, the dynamic nature of power was illustrated by UPSAB's 2013 decision to eventually work with government to fund UPSAB infrastructure and, in some cases, to have PDAM provide water to users.

Similarly, EWB's power over the project design and UPSAB was not absolute. The power dynamic between EWB and UPSAB was considered in EWB's design documents, which described EWB's role as "fostering ownership of the system within the community, despite [it] not being entirely designed from within the community" (EWB TAN, 2008: 10). UPSAB's power over the design did shift as they found confidence (power within) through the project process and in response to EWB's participatory approach. The paper now turns to examples and analyses of the aspects of EWB's participatory practice which fostered significant positive changes in UPSAB power.

### **Power through partnership**

As described earlier in this paper, 'power with' refers to a collective sense of agency and the ability to work with others to create change, which UPSAB clearly found in its partnership with EWB. EWB's involvement brought in funds as well as technical and management expertise to support UPSAB's vision. When asked what the benefit of partnering with EWB was, in 2008 a UPSAB committee member responded with:

It was a very good communication between us. In my opinion, what we obtained from working with EWB was mainly (new) knowledge. What we have learned from this means so much to us, especially the planning system, the (knowledge of) system planning and building, and maintenance.

The partnership between EWB and UPSAB helped engage disengaged UPSAB members at initial stages of the project. There was an increased frequency of UPSAB planning meetings, field visits and involvement in maintenance works. In turn, this provided a structure for UPSAB members to participate meaningfully in water management improvements and to expand their skills. The partnership also brought a level of legitimacy to UPSAB and began to shift users' negative attitudes towards UPSAB.

As UPSAB achieved quick wins and raised its visibility, participation expanded beyond the core team. UPSAB found additional power in their relations with their own citizens as others became involved in project activities either on request from UPSAB or of their own volition. Questionable relationships with banjar members began to be redefined, with banjar communities engaging in site surveys to define pipe routes, participating in maintenance activities, and increasing their attendance and being more vocal in meetings. The partnership with EWB thus also supported UPSAB's 'partnership' with their own constituents.

### **Application of local assets and inquiry**

Although EWB held power over technical aspects and brought donors and expertise to the project, UPSAB held power with respect to the local resources which were contributed to the project. These included:

- Institutions and associations: existing governance structures within the village, existing organisations such as UPSAB and the human resources they could provide, and support at traditional and non-traditional levels of governance and from women's groups;
- Individual knowledge and assets: local knowledge of land ownership, water access, strong cultural traditions, local leadership, existing expertise in construction and maintenance of water infrastructure, local networks and relationships;
- Physical resources and infrastructure: local suppliers and building materials, existing water resources and infrastructure, natural resources such as stone, timber and sand sourced from Tenganan land.

These local elements were critical to the design of the project. SBA practices such as ABCD often use participatory and codified approaches to map resources in the early stages of an intervention. Similarly, in this case inquiry was used over time to first recognise local resources and then integrate them into the design. SBA scholars argue development paradigms often define 'beneficiaries' by what is lacking hence, propagate a relational power dynamic between outside experts and partner communities (Kretzmann and McKnight, 1993; Mathie et al., 2017). However, it was clear Tenganan were far from empty in terms of available assets. The identification and use of local resources and structures also avoided the erosion of UPSAB power by minimising EWB inputs, hence, this provided a greater opportunity for UPSAB to lead.

Inquiry as a participatory tool also stimulated demand for support from UPSAB and minimised EWB 'power over' design. For example, "what if...?" "how might UPSAB...?" type questions were used in contrast to directives. Such inquiry had several effects. Firstly, it reduced EWB's power over design. Secondly, it created space for UPSAB reflection of their own resources (power within) and potential capacity gaps. Third, it supported prioritisation and forward planning (power to). For example, consideration of "how might UPSAB fund maintenance works?" led to the discovery of banjar Dauh Tkad's successful fee collection and maintenance system. Whaley and Cleaver (2017) refer to the use of existing structures as 'going with the grain' and noted the benefits of using existing structures as opposed to creating or imposing new ones which may clash with local structures. In this example, inquiry led to a process of discovery of existing practices for both EWB and UPSAB, and the existing fee model was eventually adopted by UPSAB.

## Scenarios

Inquiry in the form of scenarios was used to demonstrate the management capacity of UPSAB to private donors. With limited infrastructure (prior to construction) and no track record of improved management performance, demonstration of capacity was a challenge. This process also raised the question of who defined 'appropriate management capacity' – donors, users, partners, or UPSAB? A formal assessment was contrary to the SBA of the project, and instead EWB led a semi-formal process of seeking UPSAB's response to 22 future-focused scenarios. This left room for observing decision-making in practice, and allowed both UPSAB and the donor to identify potential gaps in a (simulated) applied context. Some example scenarios (from Hawker, 2008:1-4) include:

- Five banjar will be supplied with the new system. How will the UPSAB ensure that water is equally allocated?
- An illegal connection has been found on the line from Tenganan to Dauh Tkad and it is leaking. How will UPSAB manage this situation?
- UPSAB is planning to do maintenance on the main line from Batu Asah, which will take at least two days. This will mean no water for most of that time. How will UPSAB manage this situation?

The responses highlighted UPSAB's 'power with' (working together), 'power within' (drawing on the skills of existing members), and its 'power to' respond to management challenges. For example, UPSAB responded to the last scenario with:

UPSAB will pay someone in the area of Batu Asah to make regular reports on the works for their duration. UPSAB will make public notices in each banjar about the requirements, and progress of maintenance works. UPSAB will instruct the technical team – [technical staff member] and [allocation/metering staff member], on the works. If they are unavailable, it is the responsibility of [technical staff member] to hire someone else, or people in the community near to the works may help out with work due to their sense of responsibility to the work on their land (...). UPSAB will plan to have a stock of spare parts. If out of stock, [technical staff member] to report to UPSAB Chair with requirements and more will be ordered (...) UPSAB need to make a list of what [tools] they need. Individual banjars do not need tools – [they] can borrow from UPSAB. (ibid: 2)

Having to 'prove' UPSAB's capacity came with the risk of fostering the donor's 'power over' the programme. However, the scenario approach worked for both the donor and UPSAB. UPSAB members were able to explore and demonstrate their responses within their own context. The UPSAB project manager expressed his surprise at the capacity of UPSAB members to problem-solve in a structured and collaborative manner. Their responses to the scenarios and their demonstrated decision-making competency was significant. It contrasted noticeably with management capacity 12 months earlier, when UPSAB members were disengaged and had little understanding of their responsibilities or how they would improve their practices. Hence, the scenarios provided the opportunity for UPSAB to test their capacity and systems and allowed EWB and UPSAB to evaluate and demonstrate how management capacity had progressed.

## Flexible timeline and action learning

The commitment of EWB and UPSAB to a flexible timeline in the project design (Third et al., 2009) also mediated EWB's 'power over' UPSAB. And the project did take time. Despite a relatively simple gravity-system design, the pre-construction phases were long, taking close to two years. However, from a water management and capacity development perspective, this time frame meant that the project evolved in step with UPSAB's development and was not driven by an externally imposed timeline. EWB was able to respond to capacity demands from UPSAB as they arose, and support was 'on tap' rather than 'on top' (i.e. power with, not power over). It also gave UPSAB time to navigate internal relationships in Tenganan and to engage in dialogue with users and banjar leadership (power with), as indicated in the quote below.

We differentiate this demand-responsive support from the demand-responsive approach traditionally described in CBM literature (as described earlier).

From the beginning, the plans of the system were discussed by all of us (the UPSAB and the local users). Therefore, [the] locals got well-informed about how it worked, where this would go... the process raised locals' awareness of how they could maintain the system in the future. (Interview with UPSAB Project Manager, 2008).

However, a long time frame is not without cost nor feasible for many donor-driven INGO projects. Donor incentives are often geared towards numbers of RWS systems which can compromise on quality (Lockwood and Smits, 2011; Neely and Walters, 2016) and prohibit a deep engagement with CBO partners. Extended timelines also represent a cost to users through the delay of improved water supply. This was the case with the project, although UPSAB viewed the duration as necessary and "not a problem for us [i.e. UPSAB]", users were interested in more immediate results and expressed impatience with the timing of the project. For example, a Banjar Chief in 2009 reported "we think the project is running well, but it has been too long since the project started... it has not been finished yet".

This distinction of demand based (i.e. on tap) capacity support is important. Hutchings et al. (2015) review of 174 successful CBM projects described the importance of technical and management capacity building in RWS sustainability. However, the study did not describe how capacity building was best delivered. In this case study, demand-responsive support tended to be more successful than proactive capacity building, as illustrated in the water quality training example described at the beginning of this section. Training was more successful when it had immediate relevance and application. For EWB, this responsive and flexible approach<sup>7</sup> also supported dynamic management of project risks rather than controlling for risk through a pre-defined and externally driven design (similar approaches are advocated by Narayan-Parker, 1995). For example, water allocation had been an ongoing challenge for UPSAB, but it remained a low priority in the early stages of the project. Only when UPSAB had reached a level of maturity (in capacity and 'power within') did water allocation move from a general concern to a priority. EWB was then able to respond to the prioritising of this issue, and constructed a model water manifold with simple valves and water meters. This then enabled UPSAB to experiment with the mechanics of allocating water, grasp what would have otherwise been an ambiguous concept, and make design choices ('power to') as to how they would manage water allocation.

### **Participation spaces subordinate to UPSAB's vision**

Despite the initial poor management practices of UPSAB, the power within UPSAB leadership was evident from the project onset, as illustrated by the following quote from a 2008 interview with the UPSAB project manager:

Question: What changes would you like to see from the project?

Project manager: I think for me, the change not so different to [UPSAB Chair]. I mean with this system we can plan everything right from the beginning to the end so the people who involved here can know from where we start and to where we will go. By doing the project like that, I hope that the people have a sense of like ... they [will] care.

...Not like the government project usually they do not know the planning, who doing what and why the project become like this, they just receive, they just accept the thing which is already, I mean, done. This is "you should apply this system", and so on. So they do not really know the story behind the project. So, I think it is good because we are involved right from the beginning, even if it takes a long time, for us probably not,

<sup>7</sup> EWB project documentation included managing project risk through a flexible design (Bowen and Third, 2008)

too, I mean not too much of a problem. But probably for you, the scheduling, it is a bit, uh, so for that, I think we would like to say sorry... [laughing]

Community demand for improved water (i.e. DRA) is a salient factor in RWS sustainability (e.g. Katz and Sara, 1997; Whittington et al., 2009; WaterAid, 2011; World Bank, 2017b). In this case, UPSAB demanded improved infrastructure and, significantly had demand for improved management and a deeper level of involvement in the project. We identify this demand as the 'UPSAB vision', and its prominence was significant. The strength of this vision reduced EWB's need to stimulate motivation or induce UPSAB's participation (Mansuri and Rao, 2012). Gaventa (2006), as noted earlier in this paper, pointed out the degree to which the power of actors in a space is determined by who controls participation within that space. UPSAB's vision both initiated the project and created the subsequent metaspace for EWB's participation. In this way, it was EWB who participated in UPSAB's vision rather than the other way around. This, to some degree, flipped what is often the prototypical dynamic between INGOs and CBOs. Even when transformative participation is discussed in literature – for example, empowerment according to Arnstein's model – language still tends to reflect INGO's control of participation space. Hence, we view this meta participation space as contrary to more common approaches where the INGO retains control of both the vision, the project direction, and the spaces of participation.

The strength of local leadership in Tenganan was a significant factor in the subsequent primacy of the local vision. Importantly, EWB's participatory approach, on the whole, supported and did not impede the strength of the local vision and leadership. Therefore, when EWB created participation spaces during the project – for example, seeking local input into technical design – these remained subordinate to UPSAB's overarching vision.

### **Power through resistance**

In the course of the project, power within UPSAB's membership and the power of members over the technical aspects of the project also changed. As UPSAB's capacity and confidence grew (power within), so did their power to have input into the project. Narayan-Parker's (1995: 26) study of 121 RWS projects described the development of 'power within': "[A]s people participate in making decisions and problem-solving, learning takes place (...). [I]t leads to changes in attitude, behaviour confidence and leadership". This was observable in UPSAB. For example, a banjar and UPSAB member from Bukit Kauh reported increasing his own skill levels through working with an EWB volunteer. Reflecting on his experience, he noted that "installing pipes, I learned it from [an EWB volunteer]. It's like, a continuous learning. Learn something now, learn another new thing next. Installing pipes, digging wells, setting up air valves (...) if something wrong happens, I fix it".

UPSAB members' 'power within', and their 'power to' influence design was demonstrated by their rejection of a slow sand filter designed by EWB. UPSAB opted to forgo the filter and instead focus on the improvement of their management practices. This was a significant decision and met resistance from Australia-based EWB engineers. EWB had invested time and money in the filter design and, in addition, filtered river water was core to meeting overall project aims of increased quantity and quality of water. This rejection was a form of power expressed as overt resistance. The firmness of UPSAB's rejection represented a milestone in their power within and in their assertion of agency and control over technical design which, in the process, challenged EWB's power over the design. Our suggestion is that the level of trust in the relationship with EWB meant that UPSAB's resistance could be overt, and that their assertion of 'power to' represented their growing confidence and their capacity to exercise agency in RWS management.

The decision to reject the filter later proved sound. In a subsequent village committee meeting, users and local leaders raised concerns about the spiritual purity and ceremonial suitability of treated river water, as human cremation remains were often deposited into the river. In addition, the filter efficacy would have been compromised by downstream contamination due to poor quality piping and household

water storage practices. UPSAB later decided to install a well and diesel pump; in 2015 they commissioned a new storage tank to supplement their water supply in the dry season; they since have also replaced water lines and moved major lines away from polluted drainage areas. To date, these changes have proved adequate in meeting annual supply, although the microbial water quality at tap stands is unknown.

### **Power manifested in infrastructure improvements**

UPSAB's power to create substantial changes in water supply took time. It required over 18 months of dialogue, planning and minor works before major construction commenced. Additional pipelines improved the quantity of supply to existing and previously unserved locations. Installation of water meters and manifolds designed by EWB and UPSAB gave UPSAB power to allocate water in a more equitable and accountable manner. The improved quantity of supply reduced conflict and increased confidence in UPSAB. As reported by an UPSAB member in a 2009 interview, referring to the improvements in physical control of the RWS system, "...now, it is easier for me to coordinate the distribution. It used to be confusing back then. The measurement was not correct. Now, it is easier to check how much water the source distributes to which village".

UPSAB's shift in power across the four dimensions and its subsequent improvements in management competency and infrastructure, resulted in the cessation of EWB's direct assistance in July 2010, approximately four years after project commencement. There was uncertainty as to how UPSAB would continue to function and manage the water supply in the absence of EWB's 'on tap' assistance. In addition, the partnership had not met all the original targets of water quality and quantity. Importantly, UPSAB still had no regular water tariff collection. Despite these concerns, subsequent visits in 2012 and 2015 by the lead author indicated that UPSAB had continued to improve its water supply, and this was confirmed in an interview with the new chairperson in 2018:

In last three years, we have replaced the pipelines in Tenganan Pegeringsingan, moving them to the front of the houses. This has reduced the leakages to almost zero and improved the quality. The works were at a cost of almost [Rp]100 million [Indonesian rupiah]. We have also built a new tank in Batu Asah at a cost of 135 million and installed a new pipeline at a cost of 175 million with money from the Government... In Bukit Kangin they have also replaced the pipes to a larger size to improve the quantity... Now in 2018, in Gumung, they are extending distribution to new areas (Interview with UPSAB Chair, 2018).

The UPSAB design was delivered through government and contractor support. The interview in 2018 indicated they had completed major capital works worth more than 400,000,000 Indonesian Rupiah (EUR\$25,555) over the three previous years, which is approximately 50% more than the capital expenditure of the collaboration with EWB and was delivered in a shorter time frame. UPSAB reportedly was now also charging and collecting a regular user fee which payed a nominal salary for five staff and funded maintenance work.

The changes in UPSAB power across all dimensions also led to improved relationships with users. This created a virtuous circle, where improvements in power led to improvements in management performance, which led to greater trust and confidence from users, which in turn led to a greater sense of UPSAB's power to further improve the RWS. Such changes became evident during the partnership with EWB and appeared to have continued. When the new UPSAB chairperson in 2018 was asked how community trust and confidence in UPSAB had changed, he responded that

[t]he main thing that I see from the community is now they have something 'sure', you know? Anything related to water there is now someone that is in charge of that (...). So now (...) I see a trust [from the] community [in] UPSAB, because we are able to manage this water system for several [years]. They are quite happy with that because the water keeps running. You know, whenever there is maintenance, it is quickly responded (...) as long as people report this to UPSAB, then on the next day there will be someone to fix it. That is the difference with before (...). People are believing in UPSAB (...).

## Reflections on the power lens

The power lens is limited by its simplicity. Based on the analysis, we identified three specific limitations. First, it is not explicit on the visible or hidden nature of manifestations of power (we refer the reader to Gaventa's powercube framework for an alternative), and some invisible power dimensions between UPSAB and EWB therefore likely remained hidden in this analysis.<sup>8</sup> Second, although multiple power types are identified, the user is left to interpret how they relate to each other and how they change over time. The power lens is therefore unlikely to capture the full complexity of the power dynamics between CBOs and INGOs. In the Tenganan project, the extended period of the partnership and the presence of EWB personnel on the ground likely mitigated some of the limitations of analysing power over time. Third, there are structural limitations to the power lens application. The scope of this research was focused on the relationship between EWB and UPSAB. It is likely that other peripheral actors and structural factors who influence, and are influenced by, the partnership are not considered by the binary analysis. For example, although changes in power for UPSAB were generally positive, it may be that other local actors such as village chiefs and users were sidelined through the partnership with, and presence of, EWB. Similarly, the focus at the local level ignores other potential determinants of UPSAB power beyond the bounds of the partnership, for example the impact of the regulatory environment on UPSAB's management efforts.

Despite these limitations, the simplicity of the lens also had utility as a useful frame to identify the dynamic nature and multiple dimensions of power, and their response to participatory approaches. As noted in this paper, power is often described in one-dimensional terms and is associated with either domination or powerlessness. The use of the power lens in this case study shows how multiple forms of power for UPSAB coexisted and shifted with time and space. Expressions of power also varied, from the less-visible 'strength of local vision' to productive expressions of power such as changes in management capacity.

## CONCLUSION

This paper used a case study approach to highlight the impact of the power dynamics between INGOs and RWS CBOs. The Government of Indonesia aims to achieve universal access to water supply by 2019, with 60% of this access delivered via CBM (Al'Afghani et al., 2015). Literature on CBM reforms tends to focus on technical and managerial aspects, with limited focus on the sociopolitical dynamics inherent to CBM. We agree with Whaley and Cleaver (2017) that the power relationship between CBOs and donors (in this case INGOs) is an important but neglected area which has implications for CBO management performance.

The power lens used in this research analysed the effect on a CBO's power of an INGO's participatory approach, in this case how aspects of EWB's participatory approach impacted various dimensions of UPSAB power. Positive changes in power were gauged by improvements in UPSAB's technical and managerial capacity and its ability to find and exercise agency in RWS management. The findings have broader implications for advancing the GOI's target and improving approaches to CBM. Importantly, they highlight that participatory approaches are not power neutral. The power dynamic between INGOs and CBOs has significant implications for the management capacity of CBOs. Hence, an explicit and proactive engagement in the power dynamics between INGOs and CBOs can support various dimensions of CBO power and ultimately improve CBM outcomes.

In this case study, EWB's participatory approach attempted to support rather than inhibit UPSAB's power. Examples of this included the recognition and utilisation of local expertise and resources, the use of inquiry and scenarios, a flexible timeline and design, and their support of the local vision. These

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<sup>8</sup> There is a significant body of literature which highlights the insidious nature of invisible power and its role in perpetuating inequality. See VeneKlasen and Miller, 2002; McGee, 2016.

elements are less tangible than structured capacity building approaches such as training, but we believe they were significant drivers of improvements in UPSAB's management efficacy. A notable missed opportunity in the project was poor engagement with female stakeholders and the lack of a process to improve their power and influence in water supply management.

The primacy of a nuanced and strong local vision in shaping the CBO's ownership and motivation was highlighted by this case. This may have implications for INGOs and development actors who implement RWS using CBM. In Tenganan, the strength of the local (UPSAB) vision framed the participation spaces. UPSAB leadership's vision was nuanced beyond simply 'community demand' as described in DRA and CBM literature. Their vision articulated the nature of RWS improvements and UPSAB's desired level of engagement, which provided a useful reference for EWB's participatory approach and helped ensure that EWB's involvement supported rather than inhibited the vision. For similar projects where this vision does not preexist, supporting INGOs may decide to work with communities and CBOs to elicit their local vision for water supply and their desired level of engagement. Research suggests that SBA is an emerging and useful tool in development which supports the visioning process and local empowerment.

Understanding the impact of participatory approaches on CBO power is important to the advancement of GOI targets. This case study shows how power had both intrinsic and instrumental value for the CBO and how changes in the types of power led to UPSAB having greater confidence and enhanced capability to manage their RWS. A virtuous circle was created: as their understanding of the social and technical dimensions of water supply grew, choices and new avenues of power to initiate change emerged. This further added to the confidence and agency of UPSAB and their capacity for seeing choices and making decisions. This 'power to' included, at times, the power to reject design advice from EWB. UPSAB's enhanced power has continued to serve them well in their longer-term management of Tenganan's water supply service, extending beyond the scope of the project and resulting in ongoing improvements.

This paper focused on power dynamics in the implementation of an RWS project. Accountability mechanisms for CBOs – although not a focus of this paper – are also important in delivering RWS (Lockwood and Le Gouais, 2011; Lockwood and Smits, 2011; Hutchings et al., 2015; World Bank, 2017b). The use of the diffracted power lens could be extended to analyse the relationship between accountability structures relevant to CBOs (for example, user, government, and/or CBO evaluation; local governance oversight; or RWS service targets) and determine their impact on CBO power and subsequent RWS management approaches.

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## REFERENCES

- Al'Afghani, M.M.; Paramita, D.; Avessina, M.J.; Muhajir, M.A. and Heriati, F. 2015. The role of regulatory frameworks in ensuring the sustainability of community based water and sanitation. Bogor, Indonesia: CRPG (Center for Regulation, Policy and Governance) Indonesia .
- Antlöv, H. 2003. Village government and rural development in Indonesia: The new democratic framework. *Bulletin of Indonesian Economic Studies* 39(2): 193.
- Antlöv, H.; Dharmawan, L. and Wetterberg, A. 2016a. The promise and pitfalls of Indonesia's village law. *SDGs Center Universitas Padjadjaran*. <http://sdgcenter.unpad.ac.id/the-promise-and-pitfalls-of-indonesias-village-law/> (accessed 24 April 2019)

- Antlöv, H.; Wetterberg, A. and Dharmawan, L. 2016b. Village governance, community life, and the 2014 Village Law in Indonesia. *Bulletin of Indonesian Economic Studies* 52(2): 161-183.
- Arnstein, S. 1969. A ladder of citizen participation. *Journal of the American Planning Association* 35(4): 216-224.
- BAPPENAS. 2003. The National Policy on the Development of Community Based Water and Environmental Health.
- Batliwala, S. 2007. Taking the power out of empowerment – An experiential account. *Development in Practice* 17(4-5): 557-565.
- Bowen, J. 2006. A multidisciplinary look at capacity development and its application through the characterisation of water resources in Tenganan, Indonesia. Engineering Dissertation, University of Western Australia.
- Bowen, J. and Third, K. 2008. Project Background Training - Tenganan Water Supply Project, Project Approach. In Training for Western Australia Water Corporation.
- Bowen, J.R. 1986. On the political construction of tradition: Gotong Royong in Indonesia. *The Journal of Asian Studies (1986-1998)* 45(3): 545.
- Cahill, A. 2008. Power over, power to, power with: Shifting perceptions of power for local economic development in the Philippines. *Asia Pacific Viewpoint* 49: 294-304.
- Carrard, N.; Crawford, J.; Halcrow, G.; Rowland, C. and Willetts, J. 2013. A framework for exploring gender equality outcomes from WASH programmes. *Waterlines* 32(4): 315-333.
- Chowns, E. 2015. Is community management an efficient and effective model of public service delivery? Lessons from the rural water supply sector in Malawi. *Public Administration & Development* 35(4): 263-276.
- Cleaver, F. 1999. Paradoxes of participation: Questioning participatory approaches to development. *Journal of International Development* 612: 597-612.
- Cooke, B. and Kothari, U. 2001. *Participation: The new tyranny?* Zed Books.
- Cooperrider, D.L. and Srivastava, S. 1987. Appreciative inquiry in organizational life. *Research in Organizational Change and Development* 1(1): 129-169.
- Cornwall, A. 2008. Unpacking "Participation": Models, meanings and practices. *Community Development Journal* 43(3): 269-283.
- EWB TAN. 2008. Tenganan Water Supply Upgrade - Engineering Design Report. Engineers Without Borders Australia.
- Foster, T. 2013. Predictors of Sustainability for Community-Managed Handpumps in Sub-Saharan Africa: Evidence from Liberia, Sierra Leone, and Uganda. *Environmental Science & Technology* 47(21): 12037-12046.
- Foucault, M. 1978. *The history of sexuality: An introduction*. Pantheon Books.
- Foucault, M. 1991. Space, knowledge and power. In Faubion, J. (Ed), *Essential works of Foucault, 1954-1984*, pp. 349-364. New York: New Press.
- Gaventa, J. 2003. Power after Lukes: An overview of theories of power since Lukes and their application to development (draft). Brighton: Institute of Development Studies.
- Gaventa, J. 2006. Finding the spaces for change: A power analysis. *IDS bulletin* 37(6): 23-33.
- Gaventa, J. and Cornwall, A. 2008. Power and knowledge. In Reason, P. and Bradbury, H. (Eds), *The Sage handbook of action research: Participative inquiry and practice*, pp. 172-189. Sage.
- Harvey, P.A. and Reed, R.A. 2007. Community-managed water supplies in Africa: Sustainable or dispensable? *Community Development Journal* 42(3): 365-378.
- Hawker, K. 2008. Response to scenarios - UPSAB EWB donor meeting minutes 16 November 2008.
- Hutchings, P.; Chan, M.Y.; Cuadrado, L.; Ezbakhe, F.; Mesa, B.; Tamekawa, C. and Franceys, R. 2015. A systematic review of success factors in the community management of rural water supplies over the past 30 years. *Water Policy* 17(5): 963-983.
- Kabeer, N. 1999. Resources, agency, achievements: Reflections on the measurement of women's empowerment. *Development and Change* 30(3): 435-464.
- Kasri, R.Y.; Wirutomo, P.; Kusnoputranto, H. and Moersidik, S.S. 2017. Citizen engagement to sustaining community-based rural water supply in Indonesia. *International Journal of Development Issues* 16(3): 276-288.

- Katz, T. and Sara, J. 1997. Making rural water supply sustainable: recommendations from a global study. Water and sanitation program. Washington, D.C.: World Bank Group.
- Kleemeier, E. 2000. The impact of participation on sustainability: An analysis of the Malawi rural piped scheme program. *World Development* 28(5): 929-944.
- Kobayashi, K.; Ari, I.R.D.; Escobar, I.C. and Schaefer, A. 2014. *Community based water management and social capital*. IWA Publishing.
- Kretzmann, J. and McKnight, J. 1993. *Building Communities from the inside out: A path toward finding and mobilizing a community's assets*. Evanston, IL: Northwestern University, Center for Urban Affairs and Policy Research.
- Lockwood, H. and Le Gouais, A. 2011. Professionalising community-based management for rural water services. Briefing Note.
- Lockwood, H. and Smits, S. 2011. *Supporting rural water supply: Moving towards a service delivery approach*. 1. Practical Action Publishing.
- Mansuri, G. and Rao, V. 2004. Community-based and -driven a critical development: Review. *The World Bank Research Observer* 19(1): 1-39.
- Mansuri, G. and Rao, V. 2012. *Localizing development: Does participation work?* Policy Research Report. Washington, DC: World Bank.
- Mardiasmo, D. and Barnes, P.H. 2015. Community response to disasters in Indonesia: Gotong Royong; a double edged-sword. In Barnes, P.H. and Goonetilleke, A. (Eds), *Proceedings of the 9th Annual International Conference of the International Institute for Infrastructure Renewal and Reconstruction*, pp. 301-307. Brisbane, Australia: Queensland University of Technology.
- Mathie, A.; Cameron, J. and Gibson, K. 2017. Asset-based and citizen-led development: Using a diffracted power lens to analyze the possibilities and challenges. *Progress in Development Studies* 17(1): 54-66.
- McGee, R. 2016. Power and empowerment meet resistance: A critical, action-oriented review of the literature. *IDS Bulletin* 47(5): 103-118.
- Mommen, B.; Humphries-Waa, K. and Gwavuya, S. 2017. Does women's participation in water committees affect management and water system performance in rural Vanuatu? *Waterlines* 36(3): 216-232.
- Moriarty, P.; Smits, S.; Butterworth, J. and Franceys, R. 2013. Trend in rural water supply: Towards a service delivery approach. *Water Alternatives* 6(3): 329-349.
- Narayan-Parker, D. 1995. The contribution of people's participation: Evidence from 121 rural water supply projects. Environmentally Sustainable Development Occasional Paper Series No. 1. World Bank.
- Neely, K. and Walters, J.P. 2016. Using causal loop diagramming to explore the drivers of the sustained functionality of rural water services in Timor-Leste. *Sustainability* 8(1): 1-18.
- Pretty, J.N. 1995. Participatory learning for sustainable agriculture. *World Development* 23(8): 1247-1263.
- Prokopy, L.S. 2005. The relationship between participation and project outcomes: Evidence from rural water supply projects in India. *World Development* 33(11): 1801-1819.
- Robinson, A. 2012. Institutional models for management of piped community water supply in Indonesia. Study Report. WSP.
- Rowlands, J. 1997. *Questioning empowerment: working with women in Honduras*. Oxford [England]: Atlantic Highlands, N.J: Oxfam, Humanities Press International.
- RWSN (Rural Water Supply Network). 2010. Myths of the rural water supply sector. Perspectives. St Gallen.
- Schweitzer, R.W. and Mihelcic, J.R. 2012. Assessing sustainability of community management of rural water systems in the developing world. *Journal of Water, Sanitation and Hygiene for Development* 2(1): 20-30.
- Scott, J.C. 1985. *Weapons of the weak: Everyday forms of peasant resistance*. Nachdr. New Haven: Yale Univ. Press.
- Sy, J.T. 2011. The hard way to the high road: transition of community-based water groups to professional service providers in Indonesia. 59088. Water and Sanitation Program, The World Bank.
- Third, K.; Fun, O.M. and Bowen, J. 2008. Civil engineering in Tenganan, Indonesia: A unique approach to rural water supply with Engineers without Borders Australia. *Australian Journal of Civil Engineering* 5(1): 31-38.

- Third, K.; Fun, O.M.; Bowen, J.; Micenko, A.; Grey, V. and Prohasky, T. 2009. Engineers Without Borders Australia – lessons learned from an innovative approach to the upgrade of water supply infrastructure in Tenganan, Indonesia. *Water Science & Technology* 59(6): 1201-1207.
- VeneKlasen, L. and Miller, V. 2002. Power and empowerment. *PLA notes* 43: 39-41.
- WaterAid. 2011. Sustainability framework. WaterAid, [wateraid.org/publications](http://wateraid.org/publications) (accessed 12 December 2016)
- Whaley, L. and Cleaver, F. 2017. Can 'functionality' save the community management model of rural water supply? *Water Resources and Rural Development* 9: 56-66.
- White, S.C. 1996. Depoliticising development: the uses and abuses of participation. *Development in practice* 6(1): 6-15.
- Whittington, D.; Davis, J.; Prokopy, L.; Komives, K.; Thorsten, R.; Lukacs, H.; Bakalian, A. and Wakeman, W. 2009. How well is the demand-driven, community management model for rural water supply systems doing? *Water Policy* 11(2): 696-718.
- Willetts, J.; Asker, S.; Carrard, N. and Winterford, K. 2014. The practice of a strengths-based approach to community development in Solomon Islands. *Development Studies Research* 1(1): 37-41.
- Willetts, J.R.; Halcrow, G.; Carrard, N.R.; Rowland, C. and Crawford, J. 2010. Addressing two critical MDGs together: Gender in water, sanitation and hygiene initiatives. *Pacific Economic Bulletin* 25(1): 162-176.
- Winterford, K. 2016. A positive notion of power for citizen voice and state accountability. *Development in Practice* 26(6): 696-705.
- Wong, K.-F. 2003. Empowerment as a panacea for poverty – Old wine in new bottles? Reflections on the World Bank's conception of power. *Progress in Development Studies* 3(4): 307-322.
- World Bank. 2011. Multi-village pooling project in Indonesia. Handbook for community-based water supply organizations. October. Washington DC: The Water and Sanitation Program and Indonesian Ministry of Public Works.
- World Bank. 2017a. Third Water Supply and Sanitation for Low Income Communities Project - Implementation Status and Results Report. ISR30356. World Bank.
- World Bank. 2017b. Sustainability assessment of rural water service delivery models: Findings of a multi-country review. Washington, DC, USA: World Bank.

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