

A black and white photograph of a man with a beard and a backpack, wearing a dark short-sleeved shirt and trousers. He is leaning over a public water tap that is mounted on a tree trunk. Water is flowing from the tap into a container on the ground. In the background, there is a building with a corrugated metal roof and walls, and several large metal barrels. The scene is outdoors in a rural area.

SUPPORTING SUSTAINABLE RURAL WATER SERVICE DELIVERY

**DISTRICT ASSOCIATIONS OF COMMUNITY-BASED
ORGANISATIONS IN INDONESIA**

JUNE 2018

ENTERPRISE IN WASH

“Enterprise in WASH” is a joint research project led by the Institute for Sustainable Futures (ISF-UTS) at the University of Technology Sydney, which investigates the role of private and social enterprises in the delivery of water, sanitation and hygiene (WASH) services for the poor.

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ABOUT THE AUTHORS

The Institute for Sustainable Futures (ISF-UTS) was established by the University of Technology Sydney to work with industry, government and the community to develop sustainable futures through research and consultancy. Our mission is to create change toward sustainable futures that protect and enhance the environment, human well-being and social equity.

Center for Regulation Policy and Governance (CPRG) is research institution with a secretariat based at Universitas Ibn Khaldun Bogor, Indonesia. CPRG conducts research in water governance and water law.

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1 Executive summary

In the rural water supply sector in Indonesia, collective organisations exist in the form of District¹ Associations of Water Community-Based Organisations (CBOs) to complement the role of existing institutions to support water service delivery. These Associations generally consist of a set of Board members drawn from their member CBOs. This type of intermediate support organisation can provide support functions at an economy of scale, including technical assistance, access to financial support and other services. However, a previous study found such organisations to often be fragile, with limited potential for sustainability without strengthened business models (Murta and Willetts, 2014).

This study was undertaken by the University of Technology Sydney Institute for Sustainable Futures (UTS-ISF) in partnership with the Center for Regulation, Policy and Governance, Universitas Ibn Khaldun Bogor (CRPG). The study was conducted in co-operation with Bappenas and Ministry of Public Works and Housing, Central Project Management Unit for the PAMSIMAS program, and was funded through the Australian Department of Foreign Affairs and Trade.

This research investigated how, and under which conditions, District Associations of Water CBOs could be successful, and support successful operation of their CBO members in providing reliable, quality water services. More broadly, this research aimed to examine Associations' effectiveness and inform discussion on how best Associations, government and development partners can extend best practices across the country.

The qualitative study involved semi-structured interviews with 54 Association board members and 44 local government (LG) representatives across Indonesia (including 10 locations across Sumatra, Java, Sulawesi and Kalimantan). Purposive sampling was used to select ten Associations deemed to be successful by the Government of Indonesia (GoI) Central Program Management Unit (CPMU) of PAMSIMAS. Conceptual frameworks used to interpret and analyse the data included the interactive governance model (Kooiman, 2003; Kooiman et al, 2008), political economy analysis (Harris, 2013, ODI, 2009 and Fritz et al, 2009) and the business model canvas adapted for social enterprise (Knode, 2016). The qualitative data was analysed by thematically categorising, comparing and conceptualising the data in an iterative manner.

The findings are presented against the five research questions:

1. What are key successful aspects of the selected Associations?
2. What functions are Associations playing in practice, as compared with those envisaged?
3. What business model underpins Associations' functioning?
4. What factors influence the dynamics of interactions between local government (LG) and Associations?
5. What is the relationship between the Association model and the evolving institutional context for rural water supply?

¹ Kabupaten may be translated as 'Regency' or 'district' in English

Findings

Key successful aspects of the Associations: Five areas of success were common across the selected Associations. These included i) effectively linking CBOs and LG, for instance facilitating constructive communication, resolving shared issues faced by CBOs, and acting as a ‘bridge’ to LG or an ‘umbrella’ group for CBOs; (ii) strengthening solidarity, knowledge sharing and professional networks, through social interactions amongst CBOs and expansion of professional relationships with LG; (iii) providing regular performance monitoring of CBO management, service delivery and functionality, which was valued by LG and a source of pride for Associations; (iv) offering shared vision and motivation to achieve universal access to safe water together with CBOs and LG; and (v) supporting CBOs in access to finance, through local banks and village funds from LG.

Association functions in practice versus those envisaged: The research found that Associations were generally fulfilling the key envisaged functions to the best of their ability, however challenges in some areas limited their full achievement. The GoI/PAMSIMAS guidelines proposed the following functions: (i) monitoring, (ii) facilitation including technical and advocacy assistance, (iii) planning, (iv) peer-learning and (v) enacting quality standards.

In terms of the *monitoring* function, Association board members were undertaking the tasks envisaged, using voluntary time to regularly (either quarterly or annually) monitor CBO performance and services, and often traveling long distances to meet with CBOs and gather service information. Human resource and technical capacity difficulties somewhat limited the Associations’ ability to perform their *facilitation, technical and advocacy* assistance and *planning* functions, however the stronger Associations were able to fulfil at least some of these functions. Whilst *peer learning* was highly valued, considerable geographic distances made it difficult in practice. The research also found that while Associations were tasked with *enacting water service quality standards*, this is the legal responsibility of the LG and requires the establishment of a national standard for community-based water that is not yet in place.

Viability of Associations’ business model: The research found that while some aspects of a viable business model were being addressed, the Associations’ overall business model was unsustainable, particularly financially. We applied key building blocks of the Business Model Canvas² to explore this area. These business model components are italicised in explanatory text below.

In terms of *value-proposition*, while Associations shared the same perceived social value of serving the community to ensure access to safe drinking water, the research found variation with respect to *whom* the Associations viewed their value proposition- to the member CBOs or to LG-, and also with respect to exactly *what* their value proposition was. For instance, to communities and CBOs, were they a genuinely representative body aiming to advocate to LG on behalf of CBOs and community, or were they a provider of technical and support services? And for LG, were they offering access to community and CBO voice and views, or were they an outsourced extension of government, checking on CBO service provision quality? This confusion concerning the Associations’ *value proposition* was found to limit Associations’ ability to choose and pursue a workable business model.

² <http://www.businessmodelgeneration.com/canvas/bmc>

As mentioned above, financial sustainability was a concern, and the research found that diversified *revenue streams* were needed to meet relevant *operational costs*. Associations' *revenue streams* from three sources (revenue from membership fees, LG financial support and- in a few cases- providing technical services) were limited and unreliable. This was due to the mandated voluntary nature of the Association model, the inability of member CBOs to afford the membership fees or Associations to logistically collect them. It was also due to limited LG funding and unclear policies on their provision of financial support. Whilst some *operational costs* were covered by LG (for example, office expenses), other costs, for example for training, monitoring and transportation, were not. Overall, it was clear that all Associations interviewed in this research were faced with financial hardship which limited their operational capacity and financial sustainability.

Key partnerships and *customer relations* were generally positive elements of Associations' business model. In terms of *key partnerships*, Associations generally demonstrated positive relations with LGs and with PAMSIMAS staff. Only in a few cases did Associations also engage with a broader set of partners including financial institutions or non-for-profit organisations. *Customer relations* between Associations and member CBOs were generally found to be functioning well, using phone and text for communications given long distances and remoteness. One challenge was a perception by some CBOs that Association board members were paid by LG, which in fact was not the case.

Access to *key resources* was shown to limit Associations' effectiveness. In terms of *human resources*, some Associations reported turn-over in their board members, and whilst most Associations had some technical skills (to offer services or to teach CBOs), participants reported needing further skills in management and financial management. Access to *physical resources* such as transportation (car or bike) were limited and reduced their ability to support remotely located CBOs.

Factors shaping Association and local government interactions: Day-to-day interactions between Associations and LG involved communications on the needs of CBOs, planning and implementation of monitoring activities and participation of Associations in LG planning processes, for instance for new water systems. In all locations, the dynamics between Associations and LG was generally positive, with regular communication taking place, and various forms of support made available to Associations. However, using 'interactive governance' as an analytical framework, three key areas were observed to be 'pockets of tension' in the Association-LG relationship.

These three areas of tension in day-to-day interactions were: (i) LG not sufficiently supporting Associations' daily activities including not sufficiently financing their expected role in monitoring, confusion over who should pay for required water system repairs identified by Associations, and complexity as regards with whom amongst different LG agencies Associations should engage (for instance whether directly with public works department, through community empowerment agency, or through Bappeda as the lead); (ii) limited responsiveness by LG to act on monitoring information provided by Associations, exacerbated by Associations board members' shyness to raise this as an issue; and (iii) high expectations by LG of Associations' multiple roles, despite their voluntary nature.

These three above-mentioned areas of tension can be partly explained by the second order of governance, the governance institutions (both formal and informal) which enable or control day-to-day interactions, and determine the 'allowable actions' of both Associations and LG. We found that the unclear institutional framework, unresolved

Association legal status and constrained LG budgeting procedures limited the authority and effectiveness of Associations, and caused the above-mentioned tensions in day-to-day interactions. The unclear institutional framework appeared to primarily emerge due to a mismatch between the expectation of Associations to act as an umbrella organisation and draw on their member base for financial and human resources with the reality, which reveals this resource base to be weak. In terms of the legal status, while the majority of Associations had a Notarial Deed, several faced challenges to obtain a Decision Letter from the regional government which they needed to enable access to funding. Finally, limits to LG budgeting procedures, both real and perceived, also reduced LG's financial contribution to Associations. Some LG's perceived that they could not offer honorariums to Association board members, whereas Regional budgeting procedures allow this, and other LGs were doing so.

Two underpinning values and norms, *gotong royong* and *community empowerment*, associated with the third order of governance, were found to significantly influence perceptions and expectations of Association roles by LG and Association board members. These two values supported widespread acceptance of the significant voluntary time and effort contributed by the board members by both LG and board members themselves. The strength of these two values and norms appeared to be a key reason why the above desired changes towards a clearer institutional framework, legal status, remuneration for Association board members and viable business model, were not actively pursued.

Alignment of the Association model to evolving institutional context: This research identified three emerging changes to the institutional context for rural water supply in Indonesia that call into question the current Association model, and may require its adaptation to this new context.

The first change was regulations adopted in 2014 that place LG as legally responsible for water service provision. There appeared to overlap between the Association duties, as defined by the GoI/PAMSIMAS Standard Operating Procedures (GoI/PAMSIMAS SOP), and LG duties, as defined by the PP 122 government regulation for water services in Indonesia. This was particularly true in the areas of monitoring and upholding service quality standards. If LG delegates their mandated role to Associations, it could be argued that this should be formally acknowledged, and properly financially recompensed.

The second change was the increasing role of the village government and village funds in the management of community-based rural water services. The Association model promotes accountability of water CBOs to the relevant Association, rather than to village governments, and may require adaptation to better incorporate the role of village governments. Examples of such adaptation were noted in the research. For instance, in some cases, coordinated action by Associations together with LG was promoting use of village funds to improve service sustainability.

The third change was the emergence of the BUMDes (village owned enterprise) model in managing rural water supply. Amongst selected locations, some districts supported the transfer from their water CBOs to BUMDes on the basis of sustainability and financial stability. However, others were concerned that transforming CBOs into a profit-oriented enterprise model would reduce the social good aspect of the CBO. There are two major implications for the Association model. First is that Associations could proactively assist CBOs to negotiate their status and role with village governments, and cases of this were documented in this research. Second, is that a shift to BUMDes has implications for Associations' membership base, as BUMDes, with their profit orientation and primary

accountability to village government, may be less inclined to see value in, and wish to participate in, a member-based collective.

Conclusions and implications

The concept of a district Association holds merit and can offer economies of scale in providing key aspects of a rural water service delivery model. This research has demonstrated that value, in that selected Associations played important functions in monitoring service provision and facilitating communication between large numbers of CBOs and LG. However, the research also showed significant issues to be resolved, as regards the financial sustainability of the Association business model, tensions that affect the relationship between Associations and LG, and alignment of the model to an evolving institutional context in which village governments play an increasing role.

Across the research locations, both Associations and LG recognised the need for, and interest in, strengthening Associations to become self-managed independent organisations with sound financial sustainability, improved autonomy and strengthened technical and managerial capacity. The implications of the findings of this research can be considered in three groups, described below. These ideas are put forward as a basis for discussion with relevant key stakeholders as options for consideration only, as there is no single path forward.

Minor, incremental improvements to the current Association model: These improvements address common issues reported in this research. They include: LGs ensuring use of and response to monitoring data collected by Associations; LGs simplifying (to the extent possible) the process to apply for funding to support Association activities; LGs providing technical, administration and management skills specifically to Association board members, rather than just to all CBOs; sharing best practices between Associations across different regions; promoting open communication between Associations and LGs to overcome communications barriers due to status and hierarchy.

Addressing the key challenges of the current Association model: These improvements address the three main challenges revealed in this research: financial sustainability, clarification of the legal and institutional framework for Associations and systematically building human resource capacity. Financial sustainability could be achieved through a combination of shifts in LG commitment and methods to provide funds as well as use of fee-for-service models by Associations. Clarification of the legal status, mandate and authority of the Association is possible through a well-delineated institutional framework that supports Associations, water CBOs, village governments and LGs to effectively perform their roles and responsibilities. Adopting a systematic approach to building Association board member capacity, motivation and skills could be done through a nationally or provincially provided training platform including formalised recognition of skills attained.

Wider re-thinking of the Association model and its basis: Given the need for adaptation to the evolving institutional context, primacy of the village government and availability of village funds, as well as the extent of challenges faced by the Association model- it may be important to step back and reconsider the model. The service delivery functions fulfilled by an Association may be able to be fulfilled in other ways, including through actors such as private providers, PDAMs or village governments, or could be shared between an Association and such actors, narrowing and clarifying an Associations role (as either a representative body for CBOs or a service provider to them), or potentially for Associations to play an 'independent' oversight role for formal lines of accountability from water CBOs to village governments to LG.

2 Introduction

This report presents the findings of a qualitative research study on District Associations of Water CBOs in Indonesia. This study was conducted as a part of the broader '*Enterprise in WASH*' research initiative in Indonesia, Vietnam and Timor-Leste, funded by the Australian Department of Foreign and Trade (DFAT) during 2012-2018. Earlier research under this initiative demonstrated both the potential and importance of *intermediate level support organisations* to community-based organisations (CBOs) and enterprises in water and sanitation service delivery (Murta et al., 2015). Intermediate support organisations can offer an economy of scale, provision of support services, technical assistance, access to loans or other services. However, the earlier research found such organisations to be fragile, with limited potential for sustainability without strengthened business models (Murta & Willetts, 2014).

In rural areas in Indonesia, village water infrastructure is generally built by government (and development partners) and managed by CBOs. In 2004, CBOs were formally recognised as a long-term mechanism to support rural water supply provision through the Water Resources Law (Sy, 2011) and it is estimated that approximately 10,000 CBOs have been formed throughout Indonesia (Ministry of Public Works, 2012). While CBOs have shown some success in generating profit and providing water services to their communities, they operate on a largely informal basis, have limited access to finance and limited capacity in business practices and planning systems (Murta & Willetts, 2014).

Associations of both water and sanitation enterprises have been recently established in Indonesia to complement the role of existing institutions and functions to support service delivery. In the rural water supply sector, collective organisations exist in the form of District Associations of Water CBOs, including a growing number of which are supported through the Government of Indonesia (GoI) and World Bank's Community Based Water Supply and Sanitation Program (PAMSIMAS). The research objective was to ascertain how, and under which conditions, these associations can be successful, and support successful operation of their CBO members in providing reliable, quality water services.

Five research questions were developed and are presented in this report:

1. What are key successful aspects of the selected Associations?
2. What functions are Associations playing in practice, as compared with those envisaged?
3. What business model underpins Associations' functioning?
4. What key factors explain the dynamics of interactions between local government (LG) and Associations?
5. What is the relationship between the Association model and the evolving institutional context?

In answering research question four, a conceptual framework informed by the interactive governance framework (Kooiman, 2003; Kooiman et al, 2008) and political economy analysis (Harris, 2013, ODI, 2009 and Fritz et al, 2009) was employed.

While this research looked to identify successful aspects of selected Associations, more broadly it looked to gain an overall understanding of their effectiveness and assist in informing discussion on how best Associations, government and donors can support CBOs in the provision of rural water services.

3 Methodology

A qualitative research methodology was adopted and we conducted semi-structured interviews with 98 research participants in total, 54 Association board members and 44 LG representatives. Purposive sampling was used to select 10 Associations deemed to be successful by the Gol Central Program Management Unit (CPMU) of PAMSIMAS based on the following criteria:

- Essential key criteria:
 - Demonstrated effectiveness in providing support to water CBOs to improve their performance in managing ongoing services
- Other criteria (across the sample):
 - Diversity in geographic locations and cultural context
 - Diversity in Association business model and level of government support
 - Diversity of challenges (e.g. remoteness, transport, water availability)

Data collection occurred between November to December 2017 and the Association locations were located in the islands of Sumatra (3), Sulawesi (2), Java (4) and Kalimantan (1), specifically in the districts of Agam, Muara Enim, Ogan Ilir, Sidenreng Rappang, Wajo, Purbalingga, Demak, Pekalongan, Grobogan and Balangan. In each location, an interview with the Association and the Pokja AMPL -water and sanitation coordination group made up of LG agencies- (or specific members) was conducted. The research team consisted of researchers from the University of Technology Sydney-Institute for Sustainable Futures (UTS-ISF), led by Professor Juliet Willetts and in partnership with the Center for Regulation, Policy and Governance (CRPG), Universitas Ibn Khaldun Bogor led by Dr Mova Al'Afghani.

A semi-structured interview guide was developed, drawing on previous research (Al'Afghani et al. 2015; Murta and Willetts, 2014), the business model canvas (ISF-UTS, 2016); and interactive governance (Kooiman, 2003; Kooiman et al, 2008).

Detailed interview notes and direct quotes were analysed by thematically categorising, comparing and conceptualising the data in a cyclical, rather than linear, manner, drawing on the conceptual underpinnings of business models, the interactive governance framework and political economy analysis. Two limitations of this research include the purposive sampling of only 10 successful Associations which excluded Associations from eastern Indonesia and the perspectives of unsuccessful Associations, and insufficient resources to interview member CBOs who might have provided a different viewpoint on Association success and functioning. As such, this research does not claim to capture the perspectives and contextual nuances of Associations spread across all Indonesia and of varying levels of success. Rather it is contributing to the body of knowledge relating to those Associations perceived as successful, with the intention of informing better practice and modalities of operation for Associations across Indonesia.

Abbreviations used in this report include **CBO (community-based organisation)** and **LG (local government)**. In Indonesian, the translation of CBO is BP SPAM (*Badan Pelaksana Badan Pengelola Sistem Penyediaan Air Minum dan Sanitasi*/ Management agency for water and sanitation). Where the abbreviation BP SPAM has been used in research participant quotations, this language has been maintained. As such, the abbreviation CBO and BP SPAM are used interchangeably. The abbreviation LG used in the report is taken to mean the various government agencies involved in rural water supply management.

4 Findings

4.1 Strengths and successful aspects of selected Associations

This section addresses the research question: ‘What are successful aspects of the selected Associations?’ Given this research’s focus on building from strengths, whilst all selected Associations faced some challenges, it was important to identify the ways in which the selected Associations *were successful* and were able to support successful operation of their member CBOs in providing reliable, quality water services, so that these successful aspects can be replicated more broadly across Indonesia.

From the findings, five domains were identified in which selected Associations displayed aspects of success in their functioning and performance. These domains included (i) effectively linking CBOs and LG; (ii) strengthened community connection, knowledge sharing and networks; (iii) valued contribution to monitoring; (iv) shared vision and desire to achieve universal access to safe water; and (v) supporting CBOs in gaining access to finance. These five domains will be elaborated further in the following sections.

4.1.1 Effectively linking CBOs and LG

Of the ten Association management teams interviewed, eight specifically mentioned the assistance Associations successfully provided in facilitating communication between the CBOs, and between CBOs and LG, acting as a bridge and conveying information between the two entities. From the perspective of the LG, the Associations’ role as a respected umbrella group for the CBOs was seen to assist in more quickly resolving issues faced by CBOs and facilitating constructive communication with government. One research respondent from the LG in Grobogan stated: *‘the Association is a point of pride as an umbrella group for communications between the BPSPAMs [CBOs] and the government’*.

Providing an organisational structure by which CBOs could gather and meet to discuss common issues and share solutions was also perceived as beneficial by one of the Associations board members in Purbalingga:

‘this Association is very beneficial as a place for sharing from one forum to another forum. If one CBO is experiencing a problem and it had been experienced by another CBO, we are able to move fast because we already know the solution’.

In this way, both the Association’s role as a bridge and organisational structure appeared to facilitate effective communication between CBOs and LG, as well as between CBOs themselves.

4.1.2 Strengthened solidarity, knowledge sharing and networks

The Association structure was found to be successful in fostering solidarity, sharing of knowledge and strengthening professional networks. The majority of Associations (n= 8 of 10) found being part of the Association allowed for greater social interactions and connection between CBO members. They were able to gain many “friendships” and being an Association board member was a source of pride as they were able to assist,

and serve, their communities in improving the quality of water facilities. As one board member from Demak stated, being part of the Association allowed them to have: *‘a lot of friends...when strengthening the villages, that becomes something of note for us ourselves, it’s a point of pride for friends in the association’* and in Pekalongan: *‘I’m happy to be within the organisation [Association], happy to gather together with others, get more friends, friendships, I can be of service to the community’*.

The research also showed that being part of an Association allowed board members and CBO members to gain new technical knowledge in terms of infrastructure management (pumps and pipes), as well as financial and institutional management. Three Associations mentioned the opportunity participation in the Association offered in gaining and sharing knowledge. Information was primarily provided in the form of training from LG or between Association members, as explained by an Association board member in Grobogan: *‘if there are a lot of friends there are a lot of ways of thinking, if there are lots of ways of thinking then when you’ve got a lot of problems you can find solutions using new knowledge’*.

Being a part of the Association also provided board members the opportunity to have close relations with government and this was perceived as a benefit by five of the ten Associations. The opportunity to expand professional networks and work closely with government stakeholders was seen as a way to influence policy and a source of pride, as described by an Association board member in Agam: *‘we are involved in all Pokja AMPL meetings. And yes, we influence the decisions made. 70% of their policies come from our side. They really respect our view’*. These findings show that the Association model has assisted in facilitating important relationships within the Association board members, between CBO members and between the Association and LG leading to improved community connection, knowledge and strengthened professional networks.

4.1.3 Valued contribution to monitoring

The research found that the Associations contribution to monitoring the performance of CBOs was highly valued by LG and recognised as an essential role Associations play in supporting the CBOs and partnering with LG. Of the ten LG’s interviewed, eight mentioned the important role Associations play in data collection and monitoring. One LG representative from Balangan stated:

‘what’s certain is they [Associations] are useful in helping us to reach 100% clean water and sanitation, the role they play is extraordinary. We need the data about sanitation and the Association members. They have become an extension of us, our hand in the field.’

From the perspective of the Associations, in Sidrap one board member expressed that thanks to the role they have in data collection and monitoring:

‘there is a certain pride in doing [this], because all of the reports going to the district that is from us. Reports are from us. Every three months we go monitoring down to the villages to see which ones are functioning, which ones are somewhat functioning, which ones are not functioning’.

Not only is the Association’s contribution to monitoring the performance of CBOs an essential function of the Association, but also highly valued by LG and a source of pride for Associations themselves.

4.1.4 Shared vision and desire to achieve universal access to safe water

The Government of Indonesia has set an ambitious target of achieving universal access to safe water and sanitation in Indonesia by 2019, a target of '100-0-100'. From the research findings, five Associations and all of the LG's mentioned the importance of achieving universal access to safe water as a key priority area and motivating factor for community members to volunteer within the Association. As an Association board member from Sidrap stated: *'my motivation is to elevate the good name of Sidrap District, pak. Because the government of this District wants to promote [the] clean water access program of 100-0-100'*.

This shared vision and desire the Associations and LGs to achieve universal access to safe water can be seen to contribute to the successful functioning of the Association, LG and their interactions. Alignment of goals by these two entities, who are operating at different hierarchical levels of the water governance structure, means that they are able to consolidate their efforts and work collaboratively towards the achievement of this vision.

4.1.5 Supporting CBOs in gaining access to finance

In some cases, Associations were able to successfully support, and advocate on behalf of, their member CBOs in accessing finance. In Pekalongan, the Association assisted CBOs in accessing funding through the District Credit Body/Local People's Credit Bank and advocated on behalf of CBOs for access to village funding, as was the case in Agam. The situation of Associations supporting CBOs in accessing village funds is discussed in more detail in section 4.5.2 of this report. In Ogan Ilir the Association's collaboration with a third party, Water.org, was used to help strengthen the financial capacity of CBOs as explained by an Association board member: *'the aim is to facilitate organisational strengthening so they can access the bank to borrow without any collateral. We are trying with the local bank'* and they advocated on behalf of the CBOs for the use of village funds as well:

"we assist them so can allocate the village fund for village development- help make sure It is used for maintenance and construction. For example in Payak- they allocated funds to optimise the water treatment and to connect new households"

Finally, in Muara Enim the Association also assisted one CBO in successfully requesting APBD (Regional Expense and Income Budget).

The findings above have outlined the five domains in which the selected Associations were successful in supporting member CBOs in delivering safe, quality water services to rural communities in Indonesia. Whilst these successes provide insights into approaches that could be replicated across Indonesia more broadly, this research also identified a number of challenges with the Association model that will be explored in the following sections.

4.2 Associations functions in practice versus those envisaged

This section of the report will address research question two: "What functions are Associations playing in practice, as compared with those envisaged?" The role and functions of the Association have been defined by the PAMSIMAS program and outlined

in the PAMSIMAS '*Standard Operating Procedures: Formation of village SPAMS management associations at regency/city level*' document, rather than in GoI legal frameworks, law or regulations, since these do not currently refer directly to Associations. As such, the envisaged functions of the Association to be considered in this research will be taken from the GoI/PAMSIMAS Standard Operating Procedures (GoI/PAMSIMAS SOP) guidelines.

The overarching definition of the Associations' functions, as outlined in the GoI/PAMSIMAS SOP guidelines, are as follows:

Functions of Village CBOs Management Associations are:

- 1) *Partner of regional government and other Community Based Drinking Water and Environmental Health (AMPL-BM) provider institutions in the integration of programs and activities for the implementation of drinking water services on a community basis.*
- 2) *An institute that can provide or coordinate programs and support activities (facilitation), and capacity improvements (technical assistance and consultation) for BPSPAMS and organisations/other village or local community SPAMS management institutions.*
- 3) *Umbrella body for communications and joint procurement between AMPL actors on a community basis, primarily the BPSPAMS.*

For the purposes of this research report, based on consideration of the GoI/PAMSIMAS SOP and data provided by the research respondents, the primary functions of the Associations have been organised into the following five categories: (i) monitoring, (ii) facilitation including technical and advocacy assistance, (iii) planning, (iv) peer learning and (v) enacting quality standards. Each of these categories will be considered and the functions compared in terms of what was originally envisaged in the GoI/PAMSIMAS SOP and a description based on the research findings of those functions in practice.

4.2.1 Monitoring

Monitoring is a key Association activity according both to the GoI/PAMSIMAS SOP and in practice. In the GoI/PAMSIMAS SOP some of the primary relevant tasks of the Association are listed as "monitoring the improvement of drinking water supply work and the quality of service provided by the CBOs" and "mapping the work performance of CBO members". From the findings of this research, all 10 Association board members and LG representatives mentioned data collection and monitoring functions as a primary task performed by the Association. Data gathered covered institutional, financial and facilities/infrastructure performance indicators for the CBOs. The data is used by the LG and PAMSIMAS program and in general the working relationship is perceived as coordinative by the various stakeholders.

However, there were issues concerning the monitoring feedback loops and the "one-way" oriented nature of the information flow in some cases. In Muara Enim, the Association board members stated that they did not receive feedback on the monitoring data they provided. However, in Sidrap, both the Association board members and LG representatives mentioned that the Association plays an important role in providing monitoring data as well as subsequent involvement in decision making processes related to the information collected. These examples speak to the varying experience of Associations, with some coming closer to a true "partnership" with LG and others feeling disempowered and excluded from decision making processes, despite their role in gathering monitoring information. This situation is further discussed in section 4.4.1.2.

Difficulties also exist in relation to the practicality of performing the monitoring tasks. Associations board members reported experiencing financial hardship in relation to their monitoring function responsibilities as the geographic distances to be covered are often considerable, application processes for requesting operational expense funds were slow and complex and a large amount of time was needed to perform this task, affecting their own earning potential:

'The association's problem is all about funding. Because we have to go to far away areas. We are not employees- we have to support our families and that comes first. If government support then we will be more serious. Transport costs- don't leave us like that' (Muara Enim).

In order to support the Associations in performing their monitoring function effectively, the evidence above suggests that improvements relating to LG communication feedback loops and financial mechanisms could assist in realising monitoring objectives and outcomes.

4.2.2 Facilitation including technical and advocacy assistance

The Association is mandated in the GoI/PAMSIMAS SOP to "facilitate partnerships in order to improve CBOs performance" and support "capacity improvements (technical assistance and consultation) for CBOs and organisations/other villages or local community drinking water supply management institutions". From the findings, all respondents confirmed that one of the Association's functions is to facilitate support activities for the CBOs, especially in terms of technical and advocacy assistance. Often LGs request that Associations provide technical assistance to repair minor damage to facilities and infrastructure, especially pumps and pipes in cases where the Association has the technical skills within their team.

The Associations also advocate on behalf of CBOs towards the LG when there are problems encountered in the field, including facility and infrastructure damage or improvements needed, as well as advocacy if there are social or political conflicts. As explained by an Association board member in Pekalongan:

'the Association's function is actually an advocacy one, advocacy for the BPSPAMS [CBOs] that are there so that we can be in partnership in advocating things if there are problems...advocate to solve problems both with the regional government as well as internal issues in the villages themselves.'

While all Associations recognised that one of their main functions is facilitation of partnerships, the degree to which Associations feel confident in performing this role varies. In Muara Enim the Association board members explained that they were not effective in their advocacy role as they were too shy and reticent in their relations with LG, and were also conflicted in wishing to please rather than make demands of LG: *'we are shy, we are volunteers. We have to be sincere'*. Political and social conflicts also affect the extent to which Associations can perform this function adequately, which is primarily due to misconceptions about the role of both the CBOs and Associations. This was the case in Demak, where some village governments were not familiar with the PAMSIMAS program which led to political tensions over financial resources with the Association and CBOs.

Improving CBO performance through partnership facilitation and the provision of technical and advocacy assistance is a useful and important function the Associations provide. However, this research suggests that empowering the Associations with a clearer mandated role, which is communicated to all stakeholders including the Village Governments, could assist them in performing this function with greater confidence and authority.

4.2.3 Planning

The planning function of the Association includes “coordinating planning, program implementation and Association activities with members and the local Regional Government” (Gol/PAMSIMAS SOP) and sits within the LG’s universal access to safe drinking water masterplan. The district priority of achieving 100% access to safe drinking water was acknowledged by both Associations and LG’s, with Associations seen as an extension of the regional government to achieve this goal.

In terms of supporting this planning function, it is primarily through the Association’s monitoring role that they contribute to the planning for universal access to safe drinking water. As explained by an Association board member in Ogan Ilir:

‘We are part of Pakem, headed by Bappeda, the association does the monitoring, and Pamsimas consultant, and during meetings we report on the result of the mapping and village fund facilities- inform our results- so the facilitates can make planning where there is damage- we try to convince them...We report the result to Pakem so they can determine funding for new construction or repairs’.

This example shows that the Associations monitoring work directly informs the LG on the repairs and construction needs of the CBOs, which can then assist in determining funding necessities amongst the CBOs. As the LG in Ogan Ilir stated ‘*Association is a “wadah” (container) for the whole BPSPAM. So they know what BPSPAM need. We always coordinate with Association’.* This is a positive example of the Association and LG coordinating and planning work together. However, in section 4.2.1., issues concerning the monitoring feedback loops and the “one-way” oriented nature of the information flow from the Association towards the LG was reported by the Association in Muara Enim. This resulted in a breakdown of communication and the Association not understanding the point of collecting monitoring data as they were not included, or informed, as to its use.

The Associations’ monitoring function, and its importance for planning, is clear from the research findings. As expressed by a LG representative in Purbalingga ‘*data is needed for every bit of planning, for every policy decision, having the Association there we at least get data yeah. We know where it’s better for the budget to go’.* This clearly shows the value of the Associations monitoring role in assisting the LG, but while the Associations contribution helps to inform planning and they are involved in the coordination of planning activities, it is the LG that makes final planning decisions and in some cases Associations are not involved.

4.2.4 Peer learning

In terms of peer learning, the Gol/PAMSIMAS SOP states that the Association is tasked with “Facilitation of peer learning between CBOs”. In Purbalingga, the Association explained:

‘this association is very beneficial as a place for sharing from one forum to another forum. If one CBO is experiencing a problem [and] it had been experienced by

another CBO...we already know the solution, right, oh this is how [it is done], mas, so we can share the way to solve the CBO problem.'

The research also found that there is a real need for peer learning and capacity building within the CBOs, as stated by an Association board member in Ogan Ilir: *'Human resources are still low- low standards of understanding, how to manage the system. That's why in our planning we focus on capacity building'*. These two examples show that the Association structure is facilitating peer learning between CBOs and that a need for strengthening the human resources of the CBOs has been identified.

However, geographic distance makes face-to-face communication between CBOs, and the opportunities for peer learning and capacity development, difficult due to the financial constraints of bringing people together, with most communication occurring via telephone, either through phone calls or WhatsApp text messages. Associations explained that meetings could occur on a monthly, three-monthly or six-monthly basis. However, in Wajo there were no periodical meetings due to a lack of funding and they only met if there was a specific event, linked to training for example. From this evidence, it is clear that each Association took a different approach to the frequency and type of engagement but geographic and financial constraints limit the opportunity for peer learning between CBOs.

4.2.5 Enacting quality standards

Another function the Association has been tasked with is "Enacting service quality standards for CBO members" as stated in the Gol/PAMSIMAS SOP. Service standards for drinking water commonly include a minimum quantity per capita, water quality standards, reliability and acceptability standards, physical accessibility requirements and affordability criteria. These service quality standards are internationally understood through the Human Right to Water and Sanitation General Comment 15 and Resolution 64/292 and Sustainable Development Goal 6, to ensure availability and sustainable management of water and sanitation for all.

However, according to an Association board member in Sidrap, there was a lack of service standards:

'Anything that can be an indicator of service standard, for example, everyday people must get water so-and-so cubic, for instance. Has CBO done that or not? That is one of the indicator directions, that is what bapak meant. There is no standards, yet, not in a regulation'.

Since there are no legal frameworks outlining the service standards that Associations must enact, and it is in fact the regional government's legal responsibility to provide the minimum service standards to its citizens (Government Regulation No. 122/2015 (GR 122)), questions regarding why Associations are being expected to fulfil this function may be raised. The language used in the Gol/PAMSIMAS SOP can also be questioned, as it is the government's responsibility to "enact" service quality standards,³ the Associations cannot do this. The Associations can encourage, prescribe or support these quality standards but could only enact them if they were given the legal mandate to do so.

These findings point to confusion and inconsistency in the Associations expected role relative to government in enacting quality water service standards, since they do not currently carry the legal mandate for this role. The broader question of the Association

³ For instance this could be done through a village level regulation

models fit within evolving institutional structures and legal frameworks will be further discussed in section 4.5. of this report.

4.3 Viability of Associations' business models

In this section, the third research question will be addressed: "What business model underpins Associations' functioning?" All enterprises, no matter what form they take, must generate enough revenue to cover their expenses to be sustainable and business models should be used to describe how enterprises create, capture and deliver value and remain financially viable (ISF-UTS, 2016). The Association can be considered a small-scale, not-for-profit social water **enterprise** which is community owned and member-based. Considering this, it is useful to understand the building blocks upon which the functioning of an enterprise is based and the Business Model Canvas⁴ is a common approach which outlines nine building blocks. For the purposes of this research, seven most relevant of those building blocks will be considered including the value proposition, revenue streams, cost structure, key partnerships, channels, customer relationships and key resources.

4.3.1 Value proposition

It is necessary for water social enterprises to balance their social impact mission with commercial value imperatives when considering their value proposition (ISF-UTS, 2016). The findings of this research showed that all of the Associations shared the same perceived social value and mission which is to serve the community in safeguarding the sustainability of clean water services and supporting those communities experiencing difficulties in accessing sources of water. As explained by an Association board member in Demak: *'we wanted to build up the village, the community and the clean water you know...we were clean water volunteers helping the local government and the community to get access to clean water'*.

Commercial value was not a priority, as all Associations mentioned that the Associations are voluntary in nature and not profit oriented. "Gotong royong", as discussed in section 4.4.3.1., was a driving motivator and volunteerism perceived as a central value to the functioning of the Association. As exemplified by the Association in Sidrap, the board members:

'...set aside their time to fight for this drinking water pak, voluntarily, because all this is our own funds pak, even though sometimes there are also funding injections...We have no intention for profits, thus even the regional government cares and is touched to see [our] struggle so there is a little bit of an [financial] incentive from the regional government'.

However, some Associations did discuss the goods and services they offered, including acting as a bridge between the CBOs and LG, facilitating communication and advocating on behalf of Associations, as well as offering guidance and training to the CBOs. But in relation to commercial value drivers, the Association in Agam explained that CBOs did not appear to be willing to pay for these services, especially due to the misconception of CBOs that the Associations receive adequate financial support from the LG to operate.

⁴ <http://www.businessmodelgeneration.com/canvas/bmc>

Overall, the research pointed to inconsistencies in the Associations value proposition, especially in terms of *to whom* the Association is providing services. According to the Gol/PAMSIMAS SOP, the two primary goals of the Association were to: *'improve the efforts of CBOs in guaranteeing operational sustainability of and tending to drinking water and sanitation availability systems...'* and: *'increase the level of concern of regency/city governments and private business in supporting the development of drinking water and sanitation availability systems in villages'*. This suggests that the Association has more than one client, including both communities and governments. However, different value propositions are relevant for each of these actors, and for communities there was potential for more than one value proposition. For instance, to communities and CBOs, should Associations be a genuinely representative body aiming to advocate to LG on behalf of CBOs and community, or should they be a provider of technical and support services? And for LG, should they offer access to community and CBO voice and views, or should they be considered an outsourced extension of government, checking on CBO service provision quality? This confusion concerning the Associations' *value proposition* appeared to limit Associations' ability to choose and pursue a workable business model.

4.3.2 Revenue streams

The research findings showed that the Associations revenue streams were not reliable and varied per Association. The Gol/PAMSIMAS SOP outlined that the principal source of funding for the Associations should be member contributions and "other legal and non-binding sources, such as operational/activity assistance from donors, the government or Regional Government, and corporate bodies, as well as other institutions". The evidence from this research shows that the theory and reality of these revenue streams do not align.

A number of Associations, three of the ten interviewed, mentioned receiving periodic financial contributions from CBOs, similar to membership fees, but these contributions varied in value and timing. These were on a monthly, three-monthly or voluntary basis with no specific timing agreed to, and none were consistent or sufficient to cover Association operating costs. In Sidrap, an Association board member explained that the contributions are linked to the collective culture in Indonesia: *'For funds, because we are a collective culture there is a contribution, 20.000 rupiah for each functioning village, with the requirement of a minimum of 500,000 rupiah balance'*.

Other Associations did not charge CBO member fees as villages were unable to afford it (mentioned by 3 of the 10 Associations) or logistics in terms of collecting fees made it impossible (mentioned by two of the ten Associations). In some cases, even when fees were being collected, capacity issues of Associations members posed challenges as explained by an Association board member in Wajo: *'usually it works, but lately the treasurer is not yet active enough in collection (billing)...it is quite difficult for us to collect billing to BPSPAMS, how do we collect when we are far away'*.

In some cases, revenue was generated through the provision of technical services to the CBOs. This was mentioned by two Associations specifically, in Sidrap and Ogan Ilir. In Sidrap, an Association board member explained that: *'there is also [revenue] from the Pump-cleaning services of 4.5 million, also the draining'*. This case shows that the Association was earning income through the pump-cleaning and draining services it provided to the CBOs. In Ogan Ilir the Association provided technical experts for pump repairs for which they charged a service fee and the funds contributed revenue to the Association.

Another revenue stream the Association relied on was financial assistance from LG in the form of per diems, travel money and honorariums. In theory, all Associations were able to request per diems and travel money for the purpose of performing monitoring work if they obtained an “assignment letter”. However, an Association board member from Agam explained that receiving this letter took time and they had to submit the letter before travelling, as they couldn’t be reimbursed afterwards. This presented logistical challenges that often meant Association board members did not obtain the assignment letter and incurred out-of-pocket expenditures. To address this challenge, some Associations did receive honorariums, or financial incentives, from the LG. This was reported in Sidrap, Balangan and Wajo, however each LG applied different processes to provide honorariums and no systematic approach amongst the LG was observed.

From the evidence above, it is clear that the different Associations and LG’s are doing their best to obtain different revenue streams in order to fund the operations of the Association. However, due to the mandated voluntary nature of the Association model, inability of CBOs to afford the membership fees or Associations to logistically collect them, as well as limited government resources and unclear policies on providing financial support, the Associations are faced with financial hardship which limits their operational capacity.

4.3.3 Cost structure

Costs inherent to the running of the Association include office operational expenses; transportation costs; meetings with CBOs, LG and coordination meetings of the Association; professional development training of Association board members; CBO member training and workshop costs and costs associations with field trips conducted in the capacity of providing guidance, mentoring to or monitoring of CBOs. As outlined in the Gol/PAMSIMAS SOP in section 4.2. the primary sources of funding to cover these costs include CBO member contributions and financial support from donors, government or other corporate and institutional bodies.

Office operational expenses, including the provision of office space, laptops, phone credit, printing services and stationary was provided by the LG’s in most cases as five Associations mentioned this specifically. LG’s also often provided financial support for the Associations to hold meetings with the CBOs and covered field trip costs when Associations were conducting monitoring.

While CBO member contributions and external support, especially LG, should have been enough to cover operational costs many Association board members experienced out-of-pocket expenditures including in Grobogan: *‘There used to be recurring financial contributions [from BPSPAMs], but there aren’t anymore, there’s no other source of income, there’s no registration, purely from us and if there is assistance’*. Similarly, LG’s also experienced limitations in the amount of funding they could provide to Associations as mentioned in Demak:

‘There are many challenges, the first of which is on the funding side...we want to try to be able to give funding [to the Association], but this year it’s already all been cut, there’s a lot of financial lopping and savings being demanded’.

As a result, the Associations are limited in the amount of support they can provide to CBOs as the direct personal cost, as well as loss of income due to time spent on Association matters, was considerable.

4.3.4 Key partnerships

The key partnerships for the Association are those with the LG and the PAMSIMAS program. In terms of the LG partnership, as outlined in the GoI/PAMSIMAS SOP, the regional government is involved in the Association Development Team, with the Regional Secretary serving as the head of this body and the development team constituting the related Regional Government Work Unit (SKPD) bodies, including the Regional Planning Offices (Bappeda), Regional Community Empowerment Board (BPMPD/Bapermas), the Housing Authority (PU) and the Health Authority.

Other government bodies mentioned in the research include the Regional Drinking Water Corporation (PDAM), the Settlement authority (PERKIM) and the Pokja Air Minum dan Penyehatan Lingkungan (Pokja AMPL) which is the national inter-ministerial water and environmental sanitation working group responsible for sector coordination. The PAMSIMAS program is involved in facilitating the formation of the Association at the Regency/city level and providing training and operational funding support for organisers of already-formed Associations. These partnerships, in particular the Associations relationship with LG, will be explored in detail in section 4.4.

Partnerships with financial institutions and non-governmental organisations were also taking place with the Associations in some districts. In Pekalongan, the Association was working with the District Credit Body/Local People's Credit Bank to assist the CBOs in accessing funding. And in Ogan Ilir there was collaboration with water.org, a non-governmental organisation, to help strengthen the financial capacity of CBOs: *'the aim is to facilitate organisational strengthening so they can access the bank to borrow without any collateral. We are trying with the local bank'*.

In terms of partnership with LG, the research findings above showed that Associations often had multiple separate counterparts within the LG. On the one hand the Associations' are answerable to the BPMPD, however, the technical planning is done by the PU and the Pokja AMPL is led by Bappeda, who also make funding decision (or influence funding decisions). This situation shows that Associations have to maintain and support multiple different relationships to work effectively. If the Pokja AMPL is functioning well, this is less of a burden, however there can be operational difficulties within the Pokja AMPL resulting in the Association needing to maintain networks and relationships with multiple LG stakeholders.

4.3.5 Channels

The two primary methods Associations employ to reach the CBOs are face to face meetings and telecommunications, including phone calls, text messages and WhatsApp. Funding to organise meetings with CBOs is provided by LG's in some cases, as explained by a LG official in Purbalingga: *'If the Association wants to hold a meeting they ask the Dispermades [BPMD] for help in the form of a place to hold one, food, snacks'*. However, as outlined in section 4.3.3. regarding 'cost structures' financial challenges are experienced by the Association to cover these operational costs. An Association board member in Grobogan explained: *'our geographical expanse is extraordinary, Grobogan might be a larger area than Singapore, so what I mean is face-to-face communication is really a problem'*. Furthermore, in Ogan Ilir, an Association board member explained: *'we have contact details for about 50% of the 105 villages. Sometimes there is a change in village chief, and BPSPAM also changes'* leading to additional challenges for the Associations in reaching the CBOs.

4.3.6 Customer relationships

The findings of this research revealed that the Associations relationship with their key customer, member CBOs, was generally perceived as coordinative and running relatively smoothly. However, the research was limited in scope to understand this relationship in detail and is primarily understood from the perspective of the Association and LG, not member CBOs. In spite of this, the research did reveal some information regarding the Association and CBO relationship in terms of social conflict within the Association and challenges faced in influencing LG negatively affecting the relationship with CBOs. In Demak, a LG official explained: *'in general, the coordination was seen as running smoothly and working effectively...It's good and harmonious, the coordination is good'*. However, internal social conflicts within the Association were also reported with a lack of trust of CBOs members towards the Associations board members existing. In Agam, it was explained that the CBOs thought that the Association board members received a salary from the government, leading to some mistrust issues. However, the Association management team organised a meeting with all the CBOs, was able to clarify the situation and restore that trust.

In Muara Enim, an Association board member explained that CBOs initial hope regarding the formation of the Association, and the role they could play in advocating on their behalf, was curtailed once the limitations of the Associations influence within the LG came to light:

'at the time of monitoring, they have a lot of hope- they see us as a courier of the message...they really hope we help a lot. But the one who will decide is not the Association. They thought it's in our hands, but we are just a forum to give information'.

This shows that while the relationship between Associations and CBOs is generally positive, issues do exist which affect this collaboration, however further research is needed to understand this relationship and dynamic in detail.

4.3.7 Key resources

The Associations need certain human, intellectual, physical and financial resources to operate, these can be considered their key resources. Of the ten Associations interviewed, the composition of the board was between 13 to 24 members. All Associations had some female board members, except for Demak which only had male board members, and the on average across the ten Associations the gender division was 86% men and 14% women. The research findings showed that the majority of Associations (eight of the ten) stated having human and intellectual resources in the form of Association board members possessing technical capabilities in repairing pumps and pipes. As explained in Agam: *'we usually have skills to fix it. The community and we lead and fix it together'*. Other intellectual resources Association board members provided to CBOs included bookkeeping, managerial and institutional management skills and capacities, as mentioned by three of the ten Associations. However, other Associations experienced technical human resource limitations as explained in Purbalingga where their Association did not have many skilled pump technicians.

Physical and financial resources the Associations need to operate effectively relate to office support costs and transportation, especially to perform their monitoring of CBOs role. As discussed in section 4.3.3. related to "Cost structure", the Associations faced limitations in their access to these resources due to financial constraints, which affected their performance. Some Associations were provided with physical resources in the form

of a motorbike from the LG, as was the case in Muara Enim, but the board members explained the bike was not new and faced repair issue.

In terms of investing in and building the human resource capacity of Associations, the research found that three LG's mentioned that they were providing training and professional development opportunities. However, this was not exclusive to the Associations but provided to all CBOs, as explained by a LG representative in Grobogan:

'our training facilitates routine meetings, we facilitate workshops for improving our association friends' knowledge, we facilitate field studies to offer insights about proper management to the BPSPAMS, a few of the BPSPAMS that are run in a correct/orderly way are involved as well as the Association'.

It was recognised by an Association board member in Demak that further human resource capacity development of the Association was needed, as sometimes the Association did not have the skills or capacity to train CBOs in administration skills and LG intervention was necessary: *'the administration here is not good, it needs to be built up by the Community Empowerment Body. I, the Area Coordinators and the Association aren't capable to build it up'.*

The sections above have applied seven of the nine Business Model Canvas building blocks in order to understand how the Associations create, capture and deliver value, as well as remain financially viable. The research findings showed that while a number of these important building blocks are being addressed, in its current form, the Association model is not sustainable and structural changes could assist in making the Associations financially viable. This will be further discussed in the "Implications and going forward" section of this report.

4.4 Understanding the Association-local government interactions

This section will address the research question four: "What factors shape the dynamics of interactions between local government (LG) and Associations?" Two theoretical frameworks underpin the analysis of this research question. The interactive governance framework (Kooiman, 2003; Kooiman et al, 2008) and political economy analysis (Harris, 2013, Fritz et al., 2009 and ODI, 2009) have been employed to understand what shapes the dynamics of interactions between LG and Associations.

In the interactive governance framework, governance is seen as interactions taking place between a range of both public and private (human) actors and governance interactions take place across three "orders" of governance (Kooiman & Jentoft, 2009; Kooiman et al., 2008). These orders are nested within each other and the *first order* governance deals with day-to-day affairs where interactions are instigated to solve societal problems and create opportunities. *Second order* governance looks at the institutional arrangements (e.g. rules, procedures, roles, policies and visions) within which first order governing takes place. *Third order* or *meta* governance feeds, binds and evaluates the governing exercise and deals with the principles which "govern" governance.

For the purposes of this research, the three orders of governance have been conceptualised in the following way:

- *First order*: day-to-day interactions between the Association and the LG with the purpose of solving problems and creating opportunities
- *Second order*: considers the governance institutions, both at national and local levels, which enable or control community managed water governance.
- *Third order*: underlying societal norms and values which influence how the governance of water services occurs

It is important to consider evidence of “*pockets of tension*” when applying the three orders of governance model. It is argued by Kooiman that governance interactions occur between unpredictable actors with discordant interests, meaning that tensions and conflicts can occur (Kooiman, 2003). However, by considering these “pockets of tension” the diversity, complexity and dynamics of the social reality within which governance takes place becomes visible, and tools for dealing with the complexity furthermore become available” (Rosenqvist, 2018, p. 47). In applying this analytical lens, it is hoped that this research can assist in identifying ways in which the governance of community managed water services in Indonesia can be improved.

Political economy analysis was also used to reveal the underlying incentives, relationships and power dynamics that enable or frustrate change (Harris, 2013 and ODI, 2009). By gaining such insights, political economy analysis assists in advancing “challenging agendas around governance, economic growth and service delivery” (ODI, 2009). The political economy framework developed by Harris (2013) has three phases including problem identification, problem diagnosis and considerations for plausible change processes (2013). The diagnostic phase of the framework, in which the relationship between the key structural and institutional features and motivations (financial, political, personal etc.) of relevant individuals and organisations is considered, was taken to inform the analysis. The most important point for consideration being that the structural features of a context influence the incentives of various actors and their power to pursue their goals, and certain contextual features are the product of interactions between relevant actors.

Similarly, when considering the institutional arrangements and the underlying dynamics that could be conditioning the institutional arrangements and potential outcomes of relations between the Association and LG, this research has called on the political economy analysis framing employed by Mason et al. (2015). In this framing, a number of questions related to the institutional arrangements were developed relating to the actors, LG relationships, information available, allowable actions, benefits and costs and potential outcomes. For the purpose of this research, at the second order of interactive governance, which *actors are involved* in shaping this dynamic and the *allowable actions*, in terms of the formal and informal factors that govern the interactions between Associations and LG, were considered.

This research identified several challenges regarding the interaction dynamics between Associations and LG which affect the governance of community-based water services in rural settings. These key problems will be diagnosed in the following sections and analysed using both the interactive governance framework and political economy analysis to understand the “pockets of tension” and dynamics of these interactions. The three orders of governance will be employed to structure the analysis and discussion.

4.4.1 First order interactive governance

The Association and LG partnership is perceived as a bridge linking the community to the LG. Day-to-day interactions revolve around solving problems and creating

opportunities in the implementation of community-based drinking water services. Earlier in section 4.2., the day-to-day functions of the Association were outlined in detail, including monitoring of CBOs, facilitating technical and advocacy assistance, planning, peer learning and enacting quality standards. In considering these functions, selected key interactions and “pockets of tension” between Associations and LG were drawn out and are described below. Two “pockets of tension” at the first order of interactive governance have been identified as *financing day-to-day operations and activities, exchanging and acting on information and expectations of multiple roles*, these will be explored below.

4.4.1.1 Financing day-to-day operations and activities

Associations face major challenges in financing their day-to-day operations, and this is only partially addressed through minimal financial support from LGs, despite the high expectations from LGs concerning Association roles. The Association and LG interact on a day-to-day basis in terms of the LG providing financing to the Association for monitoring field trips, organisation of Association CBO member meetings and coordination on applications for water infrastructure investment and repairs within the communities served by the Association. However, a number of pockets of tension related to financing exist and from the research findings all Associations stated that funding was the biggest challenge they faced in their operations.

In terms of the monitoring function, the research showed that there is a clear expectation, and appreciation, from the LG that Associations fulfil this monitoring role. According to the Gol/PAMSIMAS SOP, the principal source of funding for the Association should be from CBO member contributions. However, often the CBO member contributions are non-existent with only three Associations mentioning receiving recurring contributions from the CBOs. As explained by an Association board member in Grobogan:

‘There used to be recurring financial contributions [from BPSPAMs], but there aren’t anymore, there’s no other source of income, there’s no registration, purely from us and if there is assistance.’ The LG also recognises the limitations of this funding source, with a LG representative from Agam explaining *‘in theory associations live from BPSPAM, but this cannot be implemented since not all BPSPAM has surplus income’*.

A lack of clarity regarding where responsibility lies for fixing broken systems due to funding constraints creates another pocket of tension. The process that should be followed is explained by a LG representative in Wajo:

‘...if there is any damage in a PAMSIMAS village location post-construction, we would initially request the Association to step in for repair assistance, [where] the Association would visit the location with the non-functioning PAMSIMAS, then the Association would report to us, and the solution could use balance from the Association BPSPAMS itself in the village if they have [it], if not, then we would look for other alternative funds to deliver [it] because the objective is one, [which is] how to maintain the facility that we have built to stay functioning’.

Therefore, depending on the size of the repair issue, it is first the responsibility of the community, then the LG or eventually the regional government to provide funding. The Gol/PAMSIMAS SOP states that regional government should provide operational and activity assistance to the Associations. However, the associated resourcing needed is not necessarily made available, as explained by a LG representative from Demak:

'There are many challenges, the first of which is on the funding side...As I said before, we want to try to be able to give funding, but this year it's already all been cut, there's a lot of financial lopping and savings being demanded.'

This evidence shows that while in theory the CBO membership fees should be the first source of funding, in practice a lack of available funds and inability of LG to act in some cases, due also to funding constraints, creates confusion and tension between the Association and LG. Provision of realistic financial structures and clarification on where responsibility lies regarding repairing broken systems is required to ensure both the Association and LG are able to perform their roles effectively.

4.4.1.2 Exchanging and acting on information

As discussed earlier in this report, the Association plays an important role in monitoring the CBOs, collecting data and "channelling" relevant information between the LG and CBOs. The Association is often referred to as a bridge between the two entities. As explained by an Association board member in Grobogan: *'...that is indeed one of our communications roles for the SKPD [Regional Government Work Unit] and the community, the Association is like a funnel. A funnel for communications.'* And in Balangan, an Association board member stated that:

'The Association's functions, among others being to help the BPSPAMS to communicate with the government, for example there are problems with funding or institutional issues, the Association will relate that to the regional government both by means of a written proposal and orally.'

While it is recognised that the Association plays a necessary role in exchanging information from the CBOs to the LG, there is a pocket of concern related to the monitoring feedback loops and the "one-way" oriented nature of the information flow in some cases. In Muara Enim, the Association board members stated that they did not receive feedback on the monitoring data they provide: *'they don't recognise us, they don't follow up. The monitoring is only to 'control'. I'm still not sure of the point of this. After it is done, nothing happens'*. When prompted to explain why this situation existed, the Association board members elaborated that they felt they were not effective in their advocacy role as they were too shy and reticent in their relations with LG: *'we are shy, we are volunteers. We have to be sincere'*. Meaning Associations lacked confidence in their interactions with LG to request feedback on the monitoring data the Association was collecting.

4.4.1.3 Multiple roles of the Association

Another pocket of tension identified in the research was the multiple roles the Association is expected to fulfil and potential strains this places on the Association board members. An Association board member in Pekalongan outlined the advocacy role the Association has and the multiple actors they must engage with to perform this function:

'The Association's function is actually an advocacy one, advocacy for the BPSPAMS that are there so that we can be in partnership in advocating things if there are problems, as well as for private enterprises/bodies/individuals. We also advocate to solve problems both with the regional government as well as internal issues in the villages themselves'

While a representative body such as the Association would be expected to have an advocacy role, needing to liaise with numerous actors, while also performing a number

of other functions, by board members who are working on a voluntary basis is not sustainable. As one LG representative in Balangan explained:

'It [Association] maybe is not effective yet, because the people are spread out, they are busy with their individual things, they aren't independent financially yet. But its role is very much required by the regional government'.

This example shows the perceived need of the Association to support the LG, but a recognition that the current model is not effective due in part to the voluntary nature of the organisation.

4.4.2 Second order interactive governance

At the *second order* of interactive governance, the institutional arrangements, both at national and local levels, including the rules, procedures, roles, policies and visions which enable or control community managed water governance are considered. From this research, it was found that the institutional arrangements within which the first order interactions take place are not favourable in providing clarity on the Association's roles and responsibilities. In this section the institutional framework including consideration of the key actors and allowable actions, legal structure within which the Association operates and the desired institutional arrangement will be addressed.

4.4.2.1 **Association's institutional framework**

When considering the institutional arrangements within which the Association operates in at the second order of interactive governance, it is necessary to consider the key actors and allowable actions. In terms of key actors, these include the Association itself, the CBO members the Association is meant to serve and the LG representatives, especially Bappeda and Bapermas. More information on key actors and partnerships can be found in section 4.3.4. of this report, under 'key partnerships'. Allowable actions consider the formal (eg regulations) and informal institutions ('ways of doing things') which govern the ability of actors to discharge their roles. The following sections consider these formal and informal institutions that govern the Associations' ability to support CBOs in providing community-based rural water supply services.

From the research findings, both the Associations and LGs described the Association as an umbrella structure, interacting with the LG to support the CBOs as described by a LG representative from Purbalingga.

'In our view the Association truly serves as an umbrella body... This way there is an umbrella group where they [CBOs] all gather so that becomes easier to do. It's also simpler for the OPD, for example it's easier when they collect data for us, easier when they talk with us about problems relating to clean water. The Association can be like a 'vehicle' for us.'

In Sidrap, the LG explained that the Association was developed to foster the BPSPAM and assist in acting as a bridge between the CBOs and LG:

'That is why we built BP SPAM, we foster it well, [and] to further facilitate its management we created the association, in 2012. That is why we made the association, which meant that we, from local government, do not deal with BP SPAM

too much, association would do [sufficiently]. It is association that is the bridge between all BP SPAM, and the local government.'

However, the findings of this research showed that the lack of a clearly defined, legally binding, institutional framework for the operation of the Association has led to varying models and ways of Associations and LG's working together to support CBOs in the provision of rural water supply services. As such, this limits the Associations ability to support the CBOs and research respondents recognised that the Association:

'does need strengthening. If it keeps going without that then I feel there will be an overall decline going forward. The Association has been put forward as a type of non-profit organisation, like a type of work, people work as volunteers and there is no stipend, there's nothing' (LG representative, Purbalingga).

And a LG representative in Agam stated: *"in theory associations live from BPSPAM, but this cannot be implemented since not all BPSPAM has surplus income"*. Thus, a vicious circle ensues, Associations are expected to empower CBOs, but Association's empowerment depends also on CBO member contributions.

4.4.2.2 Legal structure within which the Association operates

It is important to consider the legal structure within which the Association operates, as this also governs the allowable actions of the Association. In relation to the Associations legal status the GOI/PAMSIMAS SOP states that:

"It is preferable for Village SPAMS Management Associations to have a registered status with accompanying notarial documents, so that they are capable to perform their role and functions in accordance with the mandate of all members and the various managers of priorities connected to the Association's formation."

While seven of the ten Associations stated having a Notarial Deed, it was actually a Decision Letter from the regional government that was needed as without this letter Associations were unable to receive regional government funding and their institutional role and functions remained unclear. Confusion regarding the process for obtaining a Decision Letter was also noted, as an Association board member in Pekalongan explained:

'we're confused, actually, what are the follow-up steps/rules if the Association is to be issued a Decision Letter from the Regent, we're confused there? We also want some sort of acknowledgement from the Organisasi Perangkat Daerah OPD, we appeared before their assembly, we had an audience there, as we needed a regional government association called regional government management of drinking water, but from a legal perspective it turns out there is no way to accommodate the Association'.

In Purbalingga and Demak, the LG's recognised that Associations not having a Decision Letter from the Regent limited their capacity to function effectively and wanted to support the Associations in becoming independent to manage and facilitate community activities. Obtaining the Decision Letter from the Regency level would assist the Associations in receiving funding, as well as having an institutional structure that is more clearly defined. As outlined by the LG representative in Demak:

'in terms of the legal form of the Association, it's planned that in 2018 we will be prepared with a Decision Letter from the Regent, if not then a Decision Letter from

BAPERMAS. The team working to get the Decision Letter has been working for a long time.'

While the need for clear legal frameworks that would clarify the roles and responsibilities the Association has was expressed by the research participants, the process to obtain such legal clarification is not simple. Such adjustments would need consensus and political will from all the stakeholders involved. Discussion points and suggestions for possible ways forward to achieve this is discuss in the "Implications and ways forward" section of this report.

4.4.2.3 Challenges experienced by LG in allocating funding

Funding challenges were reported by all Associations and LG's as one of the biggest concerns experienced by the Association and influenced the interactions between the LG and Associations. Where possible, LG's reported trying to support the Associations financially to the best of their abilities, as was the case in three districts where the Associations did receive honorariums, or financial incentives, as explained by a LG representative in Balangan: *'...there is also APBD funding allocated for 12 people to receive an honorarium every month. (300 thousand rupiah per month).'* However, in other districts, providing honorariums was not possible as a LG representative from Muara Enim outlined: *'if they ask us to give honorarium we can't do it due to the rules.'*

This situation of honorarium's points to inconsistencies in interpretation of the institutional financing arrangements implemented in different districts. While some LG's are providing honorariums, other LG's perceive that they are unable to do due to the institutional rules in their district. However, the same rules and procedures should apply across Indonesia. In fact, based on Ministry of Home Affairs Regulation (MOHA Regulation) 13/2006⁵, direct expenditures (Belanja Langsung) and indirect expenditures (Belanja Tidak Langsung) may be applied in the support of the ongoing operation and maintenance of communal scale systems, of which honorariums are categorised under employees expenditure (Belanja Pegawai), as part of direct expenditures (Al'Afghani et al. 2017). This suggests that financing mechanisms to provide honorariums to Associations do exist, but LG's perceptions and understanding differ.

The LG's also experience limitations in the funding support they can provide to Associations due to a lack of clarity on the institutional and legal structure of the Association. As explained by a LG representative in Demak:

'going forward we can only facilitate their activities, it will be difficult to give financial assistance for core tasks and functions to the Association...it's hard because what type of institution is the Association... it's not an NGO, because it doesn't constitute a formal organisation does it? We ourselves want to see the Association given the things it needs for its work.'

This quote shows that LG's would be happy to provide increased financial support and incentives to the Association if the relevant institutional structure were clear.

⁵ Peraturan Menteri Dalam Negeri Republik Indonesia Nomor 13 Tahun 2006 Tentang Pedoman Pengelolaan Keuangan Daerah.

Finally, the funding of monitoring activities, as described earlier, presents a bureaucratic and administrative challenge for LG's and Associations. This is because funds must be applied for in advance (and take time), whereas if Associations are to be responsive to member CBO needs, and support CBOs on an on-call basis, then more flexible funding arrangements are required. However, more flexible funding arrangements that would support such responsiveness are not feasible from the LG side.

4.4.2.4 **Desired institutional arrangements**

While the lack of a clear legal status and institutional arrangements affects the functioning of the Association, there is a clear vision, and hope, for the Association to become a more independent entity to '*stand by ourselves*' (Association board member, Agam). Both Association board members and LG discussed the need for institutional strengthening of, and clear legal status for, the Association as this would facilitate access to banking, funding, financial sustainability, autonomy to act and validation of the role the Association board members have.

As explained by an Association board member in Grobogan:

'My hope going forward is that the volunteers fall by the wayside, there is a type of incentive for him, including for the Associations in other regencies. They're not merely notaries, there is institutional advocacy. At the regency level there isn't any of that yet... At a minimum if there is a Decision Letter from the Regent, there is operational funding, funding for organisational development, not just recurring contributions and the like.'

Another Association board member from Pekalongan also spoke to the desire to be more independent in the Associations operations, and to avoid becoming part of the formal village government structures:

'What we want is for there to be autonomy in our relations with the BPSPAMS and for it to be informal. This is intended to speed things up. Autonomy is standing by themselves/ourselves, informal is not becoming part of the village structures themselves.'

These examples show that revisions to the institutional arrangements of the Associations model would not only improve their operational capacity, but would provide greater recognition, and validation, of the role that Association board members execute.

4.4.3 Third order interactive governance

The *third order* or *meta* governance feeds, binds and evaluates the governing exercise and deals with the principles which "govern" governance. At this level, the underlying societal norms and values which influence how the governance of water services occurs are considered. For the purposes of this research societal norms and values related to "gotong royong" and community empowerment will be considered, as these underpin both Association board member motivations and perceptions about their role, as well as LG views about Associations. As discussed earlier in the discussion of Associations' business model (in section 4.3.), this research did not identify strong materialistic values concerning commercial drivers or desire for profit amongst Association board members.

4.4.3.1 Gotong royong

The concept of “gotong royong” which roughly translates to “mutual assistance” or “reciprocal assistance” and is a form of voluntary and spontaneous labour motivated by selflessness and concern for the common good in Indonesia (Bowen 1986; Sullivan 1995) was specifically mentioned by two Associations, Sidrap and Purbalingga, in the research, and is implicit in many of the perspectives shared by Associations about their work together. “Gotong royong”, which is linked to volunteerism and serving the community, has a long history and tradition in Indonesia and is a key motivator for community members to take on management roles in the Associations. From the research, the desire to support fellow community members was explained by an Association board member in Grobogan: *‘In terms of motivations, it’s as the Head has mentioned – we can do good things for other people, be of utility for others, as well as meet lots of people. Have a new ‘family’...’*

The research findings also described the voluntary nature of the Association board members roles and the acceptance of this as a modality to support the community, as explained by an Association board member in Demak:

‘At the beginning, we wanted to build up the village, the community and the clean water you know. And from there, we got together through PAMSIMAS...the kernel was we were clean water volunteers helping the local government and the community to get access to clean water.’

These norms and perceptions contribute to Association board members continuing their roles, including sometimes incurring expenses and hardships as described earlier in this report, due to a sense of mutual responsibility and exchange in supporting their community.

4.4.3.2 Community empowerment

The research findings showed that societal norms and values driving the Association model included a desire to support community empowerment and contribute to the prosperity of the villages. Both LG and Associations referred to community empowerment in relation to Associations’ role and used it to justify the volunteerism that characterises their ways of working rather than expectations of recompense or of a formal business model. As explained by a LG representative from Purbalingga:

‘from dispermasdes’ perspective, the Association is like a large corporation...when the regulations have been shaped, they will have sufficient funds to give life to their corporation. Their corporation that grounds itself in a spirit of voluntary community self-help and contribution. A corporation that has a basis in the Pancasila. A corporation that has a grounding in the prosperity of the village communities. This corporation will of itself shape a standard, not just at village level but at the District level, and at the least there is scope to standardise at the Regency level.’

Here, in this quote, the idea of Pancasila is also introduced, which is an Indonesian official national ideology and often referred to as The Five Principles from which social nationalism, social democracy and belief in one God are some of the guiding principles (Bowen 1986; Sullivan 1995). From the perspective of the LG representative of Purbalingga, it seems clear that the Association is considered a vehicle by which the village communities can be supported towards prosperity and community empowerment fostered. This concurrently can render LG reluctant to support Associations, as that could appear to work against the concept of ‘community empowerment’.

Beyond this, all associations mentioned their “desire to serve the community” and help those communities having difficulty accessing sources of water, as well as safeguarding the sustainability of clean water services and promoting the development of the communities. As explained in Sidrap the Association board members:

‘...set aside their time to fight for this drinking water pak, voluntarily, because all this is our own funds pak, even though sometimes there are also funding injections...We have no intention for profits’.

By empowering the communities, the Associations also gained a sense of pride and achievement in working towards universal access to drinking water, once again from Sidrap:

‘...my motivation is to elevate the good name of Sidrap District, pak. Because the government of this District wants to promote clean water access program of 100-0-100 in 2018...we have a big motivation, that most likely the name of our PAMSIMAS association will also get elevated, we could be lifted as well, pak, known, so we are also proud, pak, our association could be called an Association, pak.’ (Association board member).

While the desire to serve one’s community and contribute to change that benefits community members are positive values to uphold, the opportunity cost for Association board member this entails must also be considered. These norms and values could in fact be upholding the expectation that Association board members work on a voluntary basis, leading to out-of-pocket expenditures and loss of income for those board members. While this situation not only places strain on the personal financial situation of Association board members, it also puts the Association model in danger as adequate remuneration of board members is needed for the Associations’ long-term sustainability.

4.5 Alignment of the Association model to the evolving institutional context

This section will address the final research question: “What is the relationship between the Association model and the evolving institutional context for rural water supply?” The Association model was initially developed more than five years ago, and since that time there have been developments in the broader institutional context for rural water supply. Firstly, the PP122 came into law in 2015, with major implications concerning the legal mandate of LGs as regards water supply services. Secondly, the Village Law came into being in 2014 with its associated annual funding, and has strengthened the relative importance of village government at this lowest level of governance. Thirdly, through efforts to professionalise rural water supply service provision, approaches to legalise water CBOs have advanced over recent years, including through establishment of village-owned enterprises (BUMDes).

Below we discuss each of these developments and how the model of an Association operating at district level is positioned in relation to them.

4.5.1 Comparison of Association and local government duties

Currently in Indonesia, there are no laws or regulations which make any mention of the Association, meaning that from a strict legal perspective the Association does not have a specified function. The only document which outlines in detail the purpose and duties of the Association is the Gol/PAMSIMAS SOP, as discussed in section 4.2., however

this is not a legally binding document. The PP 122, which is the primary government regulation for water services in Indonesia and regulates community-based water services, came into law in 2015 and defines the legal duties of the LG.

There is considerable overlap between the GoI/PAMSIMAS SOP and PP 122 regulation with potential to lead to confusion as to which legal duties related to rural water services belong to the LG and which duties belong to the Association. In Table 1 below those duties and functions of the Association which overlap with the LG's legal duties are compared and have been organised into the following four categories: quality standard, monitoring, facilitation and planning. The implications of these overlaps for the governance of rural water services will then be considered.

Table 1. Comparison of Association and LG duties

Category	LG's Duties in PP 122 (2015)	Association's Duties and Functions described in GOI/PAMSIMAS SOP
Quality Standard	<p>It is the central governments responsibility to enact the Minimum Service Standard (SPAM), which is a provision regarding the type and quality of basic services which is a part of "mandatory affairs" of the central government. It is the LG who should then ensure that these SPAM are enforced (Article 1, Paragraph 19)</p> <p>The undertaking of SPAM should fulfil Minimum Service Standard as enacted by the Minister.</p>	Instituting service quality standards for CBO members
Monitoring	<p>LG should Conduct Monitoring and Evaluation of SPAM in its region (Article 40h)</p> <p>Village Government should facilitate the reporting from community groups to LG (Article 41b)</p> <p>Village Government should submit report on the undertaking of SPAM (drinking water provision system) in its territory to LG (Article 41a)</p> <p>Bupati (Regent)/Mayor should conduct fostering to [various actors] including community groups which includes: (Article 62, Paragraph 2)</p> <ul style="list-style-type: none"> • Accompany them in applying norms, standards, procedure and criteria • Guidance, supervision, consultation • Technical help and program help • Education and Training <p>"Supervision" means the activity to supervise the undertaking of SPAM by BUMN, BUMD, UPT, UPTD or community groups so that it fulfils the principles of drinking water system and the enacted Minimum Service Standard (elucidation of Art 62, Paragraph 2b)</p>	<p>Monitor the improvement of CBOs performance</p> <p>Mapping the work performance of CBO members</p>
Facilitation	LG should conduct fostering (Pembinaan) and supervision to village governments and community groups in its region (Article 40g)	Facilitate partnerships in order to improve CBOs performance

	Village Government should support, foster and supervise the undertaking of SPAM among community groups (Article 41a)	May provide technical assistance and consultation
Planning	LG should draft and enact SPAM masterplan in its region (RISPAM) (Article 40b)	Coordinating planning, program implementation and Association activities with members and the local Regional Government

From this table and comparison of duties, it is clear that there is a lack of coordination regarding water services governance. Functions and tasks that should be carried out by the LG, as decreed by law, are also being conducted by the Associations. This becomes problematic as it suggests that the Associations are performing some of the LG's job, but on an informal basis as legally they have no clear function. Furthermore, if the Association is performing a mandatory function of the government, then the Associations should be remunerated for that work. Finally, in the PP 122 certain duties have been assigned to the Village Government, in terms of monitoring and facilitation, but they are not mentioned in the GOI/PAMSIMAS SOP documentation which could lead to confusion regarding ownership of functions. All of the above suggests that a redefinition of the role of the Associations in accordance with the LG, and under the PP 122 and village law (see below), is needed to ensure effective governance of rural water services is realised.

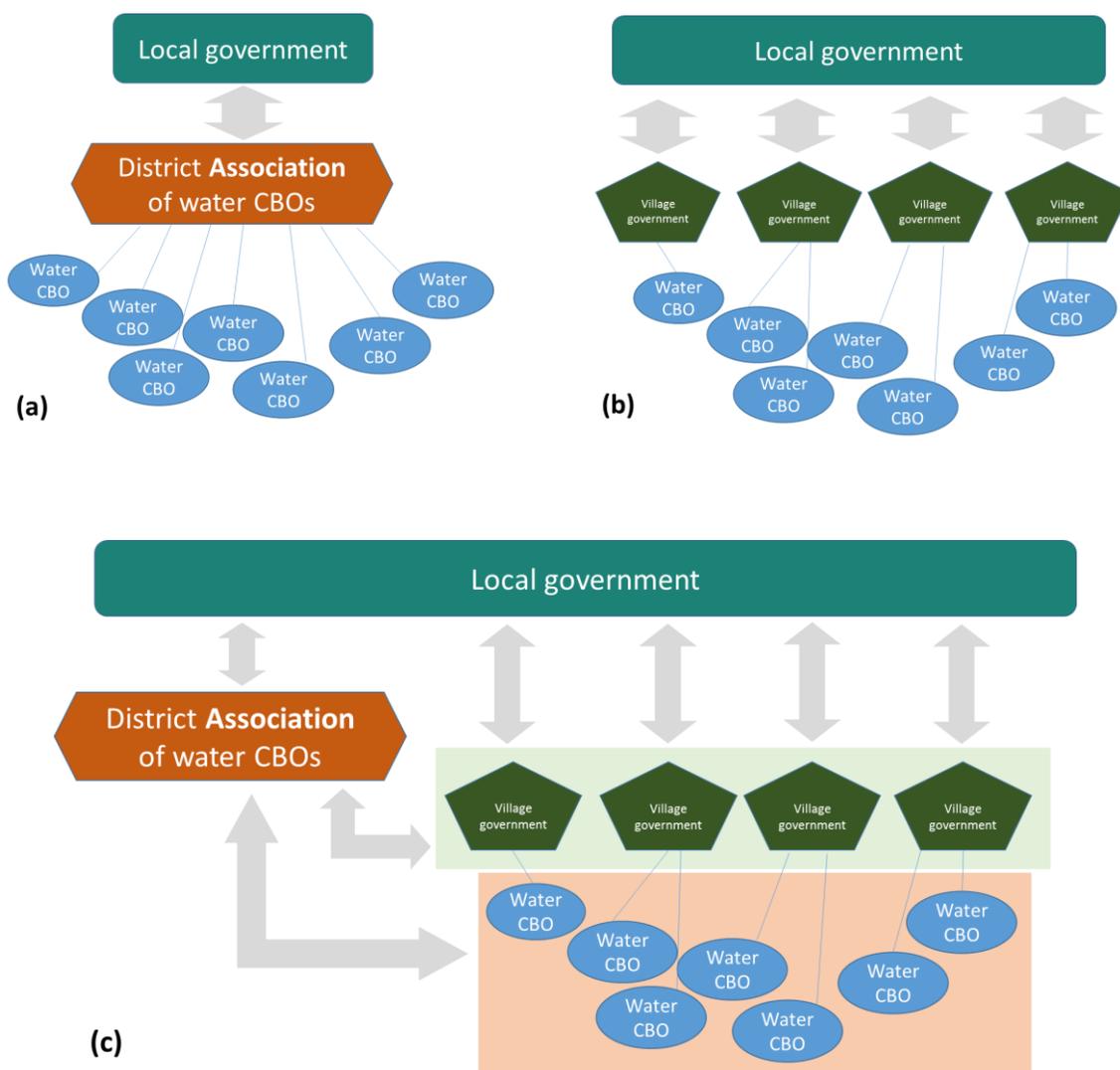
4.5.2 Increasing role of Village Government and Village Fund

The Village Law (No. 6/2014) increased the responsibilities and budgets of the village administration. Villages receive large development grants from the state's budget of up to Rp. 1 billion (approximately US\$75,000). The Minister of Villages Regulation No. 12/2017 states that villages should prioritise the implementation of local-scale programs and activities in the field of village development and community empowerment, and amongst such activities explicitly mentions development and maintenance of water supply systems as one such priority. As mentioned above, P122 also describes the responsibility of village government to support, foster and supervise community groups managing water supply services. These recent changes have implications for how water CBOs seek funding and increases the relative importance of village governments in relation to sustainable service provision.

As described in Figure 1, the governance linkages and information flows are evolving, as the institutional context has changed. This figure describes how the originally conceived Association model (shown in Figure 1(a)) has combined with the recognition of LG and Village government roles in service delivery (shown in Figure 1(b)) to lead to a more complex set of inter-relationships between these various actors (shown in Figure 1(c)).

Figure 1. Governance linkages and information flows between rural water supply stakeholders

(a) Current Association model according to PAMSIMAS GOI/PAMSIMAS SOP; (b) Recognition of role of village government and local government in rural water service delivery (PP 122); (c) Association mapped to the current institutional context, requiring the various inter-relationships (grey arrows) to be evolved and defined in this new context



Through this research, the adaptation of Associations to this new institutional context is already occurring. For example, it was found that some Associations, in partnership with LG's, are already supporting the CBOs in accessing the village fund for rural water supply. In Ogan Ilir, the Association advocated on behalf of the CBOs for the use of village funds:

'we assist them so [they] can allocate the village fund for village development- help make sure it is used for maintenance and construction. For example in Payak- they allocated funds to optimise the water treatment and to connect new households'.

This use of village funds in this way was supported by the head of Bappeda in Ogan Ilir who felt that the Ministry of Villages at the national level needed to ensure budgeting rules enable CBOs to be financed from the village fund. This LG representative explained:

'the Bupati's programs- he has ordered, so we are the only ones that dictate that villages use 25% of village fund – for water and sanitation and also waste. There is a coaching program to maintain health and ODF, and to maintain cleanliness of the source water'. And there is even discussion in Ogan Ilir of creating 'a circular to all

village heads in Ogan Ilir to use the village fund from APBN, 25% for the development of drinking water and sanitation’.

Associations also helped facilitate the relationship between CBOs and village government. The village government also has an important role to support the CBOs with their legal status. Currently, CBOs, with advocacy support from the Association, are able to receive a notarial deed and Decision Letter. As explained by an Association member from Pekalongan:

‘At most we just confer with the BPSPAMS in the village, for the BPSPAMS that don’t yet have a village Decision Letter. We act as a bridge between the Head of Village and the BPSPAMS to push for Letters of Authority from the Head of Village. Sometimes the Letters of Authority have lapsed/expired, there are new organisers, or the Decision Letter has been lost, things like that... so that there is synergy in the Decision Letter application process.’

In the evolving relationship of CBOs and their village government, Associations may also be implicated in potential conflict between these two groups. For instance:

‘there are also quite large problems because of political issues, the Village Head elections can be problematic. If the person who becomes Village Head understands PAMSIMAS then it can be easier, but if they don’t understand, we have to explain it all over again, because there is a political contract they think that BPSPAMS has a big income, a lot of money’ (Association Board Member, Demak).

The research demonstrated differing opinions amongst Associations regarding the desired level of embeddedness of the CBOs within the Village Government. In Purbalingga, the Association encourages the CBOs to actively engage with the Village Government as explained by a board member:

‘that we are now involved with the village is related to the amount of budget there, we encourage [our] friends, BPSPAMS friends to get actively involved, we also coordinate with the village administration to get invited, actively involved with the village administration’.

However, in Pekalongan an Association board member recognised the need for CBOs to coordinate with the village government but that the:

‘BPSPAMS are an institution inside of the villages, they are operating in the villages but are not a part of their structures. Maybe that is what we hope, it is more convenient/orderly that way’.

The board member stated this in reference to the desire for the ‘community empowerment’ spirit of the CBOs not be lost, suggesting becoming embedded within the village government would perhaps compromise this social value. This situation relates to the issue of whether CBOs should retain independence or become a BUMDes (village owned enterprise), which will be discussed in the following section 4.5.3.

4.5.3 Implications of BUMDes (village owned enterprise) model on CBOs and Associations’

A BUMDes is a village owned enterprise operating as a formal business or for-profit organisation within villages. In this research, the question of whether water CBOs should

become BUMDes was a frequent subject of discussion for the various Associations and LG's. It is a subject that also has implications for Associations directly, since they are constituted from water CBOs and a change in the formal status of their members to become BUMDes shifts accountability to village government rather than to the Association.

It became clear during the research that some districts supported the transfer from water CBO to BUMDes for sustainability and financial reasons. However, other respondents were concerned that transforming CBOs into a profit oriented legal model would remove the social good aspect of the CBO. One potential role for an Association could be to assist water CBOs navigate the choices and pressures that surround the choice to become a BUMDes, particularly in those cases where a water CBO has a preference to remain independent.

In Demak and Sidrap, the transformation of water CBOs into BUMDes does not constitute an option that is of interest because of the complicated procedural aspects and concern that social values will be lost. The research findings showed that both the Association and LG in Sidrap were in agreement on this point and did not want the CBOs to become a profit-making entity but rather maintain its social values:

'But with consideration that BUMDES is more profit-oriented because [it] must deposit contributions as village revenue. Meanwhile, BPSPAM is a social institution organization. [It] does not seek profits. The contributions are merely for operational, paying for the electricity and [as] operational [fund] for the management. So [they are] two different institutions, BUMDES and BPSPAM. One is socially-oriented, the other is profit-oriented. There are many village requests in Sidrap. All of a sudden [they] want to copy, BPSPAM must enter Bumdes. What I fear is that later it would be forced to be commercial. The social values would be lost. The empowerment would be lost. So, we refused. Do not let BPSPAM enter BUMDES' (LG Representative, Sidrap).

However, in Purbalingga the BUMDes model was perceived as a potentially desirable possibility. A LG representative from Purbalingga explained that the option of the Association itself becoming a BUMDes was under consideration:

'we in the village Community Empowerment authority desire for the Association to become BUMDes at the regency level, so that there is clarity in funding. There is a synergy with them in going into BUMDes and they will receive funding from contributions from each of the villages that form a part of the BUMDes'.

In Pekalongan, the LG and Association were uncertain about the benefits of CBOs becoming BUMDes, but saw it as inevitable. The LG mentioned assisting the Association to obtain Letters of Authority from the Village Heads for the CBOs and this led to some CBOs wanting to become a BUMDes. From the perspective of a LG representative:

'Then there are the BUMDes, after we have the notarial documents what is the situation with the BUMDes then? So we are waiting and seeing... because there are some that want to become BUMDes, some that want to hold out and from the perspective of the Association itself ...BUMDes, this is a challenge that lies ahead. The community is starting to become individualistic, seeing things only from the financial side, like that. So in the BUMDes themselves how will it be at the village level, like it or not there will be Village Heads who are in strong positions. Although the BPSPAMS don't want to move into BUMDes, there will come a time where they are still required'.

From the perspectives of Ogan Ilir, Muara Enim, Grobogan and Wajo, there was discussion about the BUMDes question and this model is currently being considered. However, there were differences of opinion on this matter, as well as confusion on how the BUMDes model would work and the necessity for continued evaluation. As explained by an Association board member in Muara Enim: *'I think it's good but, and there's a 'but' here. For the BPSPAM that have been running for a long time, I don't think it will work-there will be jealousy.'* The reference to jealousy means that for a CBO that has operated for a long time to turn into a BUMDes it may be more difficult, as in that process the CBO may become managed by people who are powerful in the local Village Government context. However, these individuals may not have technical skills or experience managing water systems, or build on and respect the knowledge and expertise of those individuals currently in the CBO role. Hence the potential for 'jealousy'.

The research findings above outline varying opinions and perceived costs and benefits of the CBOs adopting the BUMDes model. In Demak and Sidrap primacy was given to the social value of the Association which was not seen to align with the business focus of the BUMDes model. However, in Purbalingga and Ogan Ilir, the BUMDes model was perceived as a positive option for the CBOs to both allow for increased funding opportunity and clarity on its legal status. Other districts displayed ambivalence towards the BUMDes question expressing concerns over the individualistic behaviour such a transformation may foster and others who required more information to understand the implications of such a shift. The BUMDes model could be a more financially viable option for CBOs, due to access to the village fund this would allow and could also support CBOs to pay for the services of an Association. However, it is clear that concerns regarding social community values that may be lost and lack of clarity on how this model might work would first need to be addressed.

5 Implications and going forward

The implications of the findings of this research can be considered in three groups, starting with i) considering minor, incremental improvements to the current model ii) addressing the larger challenges presented in this research (but maintaining the same overall model) to prompting iii) wider re-thinking of the Association model and its basis.

These ideas are put forward as a basis for discussion with relevant key stakeholders including the Associations, CBOs, village governments, LG bodies, regional government, national government, private sector actors (e.g. financial institutions) the PAMSIMAS program and the World Bank. These ideas are options for consideration only, there is no single path forward, but many paths, and it may be that a differentiated model for different geographic regions (or based on other characteristics) is also important.

Incremental improvements: Firstly, the findings demonstrate a range of ways in which Associations can be supported to become more efficient, to strengthen the services they offer and their human resource capacity. This could involve building from the strengths observed in the 10 selected Associations and looking at ways to refine Association functioning through sharing good practice. The primary actors that would need to be involved to implement these changes include the Associations, CBOs and local and regional governments. Suggested incremental improvements could include:

- Ensuring that LGs engage with, use and provide feedback regarding the monitoring data Associations' collect. This would support LG to develop appropriate responses to the status of both water CBOs and water schemes, and provide recognition of the value of the monitoring data to Associations.
- Simplification of funding application processes for Associations to obtain LG financing for field trips to conduct monitoring and support visits to CBOs would also streamline activities and avoid Association board member incurring out-of-pocket expenditures.
- Provision of technical skills, administration and financial management training to Association board members by LG. Currently, training is provided to all CBOs, of which Association board member form a contingent, however it would be more efficient to capacitate Associations to train CBOs directly, and would also strengthen the attraction of to take on Board member roles.
- Sharing of best practices between Associations, and from LG to Associations, when it comes to communicating with CBOs and navigating social and political tensions within communities.
- Promotion of open communication between Associations' and LG's to avoid situations in which Associations' feel unable, or not confident enough, to discuss operational matters with the LG.

Addressing key challenges: This research has raised various critical challenges, which, without being addressed, are likely to continue to undermine the effectiveness of Associations and their functioning. The primary actors that would need to be involved in addressing key challenges include national and provincial facilitators of the Association model, Associations, CBOs, village governments and LG bodies.

If Associations are to become an effective, integral actor in rural water supply sustainability in Indonesia, then the following three challenges should to be addressed:

- Financial sustainability of the Association model must be addressed and changes to the financing mechanism made. Suggestions for such adjustments include the following:
 - Address the LG relationship in terms of funding the Association and ability to provide on-going, sufficient budget support for core activities, particularly for monitoring.
 - Consider methods to support 'fee-for-service' models. This would require significant Association board members capacity building investment but could be possible.
 - Reconsider 'realism' of a CBO member-based revenue model, as the research findings indicated that CBOs earning capacity was limited and therefore incapacitated CBOs to provide financial member contributions to the Association.
 - Advocate for the allocation of village funds for CBOs/BUMDes and a mandate that a component of such funds is contributes to the Association
 - If the CBO member-based revenue model is to be maintained then consideration of efforts to make CBOs bankable (eg Water.orgs work) and critical review of the support CBOs want from Associations could simultaneously build, and financially sustain, the Association itself.
 - Recognise and reward the (currently voluntary) contributions of Association board members and consider how an honorarium could be paid or funding grants and government budget made available to the Association in a more systematic and institutionalised manner.
- Clarification of the legal status, mandate and authority of the Association. Provide a clarified institutional framework that supports Associations, water CBOs, village governments and LGs effectively perform their roles and responsibilities. Specific suggestions to adjust for this include:
 - Provide clarity on CBO water service standards, the monitoring processes associated with these, and the relative role of each actors responsible for enacting this (LG, village government, Association etc).
 - Clarity the role of each stakeholder (water CBO, Association, LG, regional government etc) in relation to maintaining, fixing and financing water systems to ensure they remain operational.
 - Development of formal guidelines which clarify appropriate legal form and role of Associations, and stipulate the LGs responsibilities towards the Association.
- Systematically improve Association board members capacity, skills and motivation through training and roll this out to all Associations through efforts at national and provincial levels, ideally including formal recognition of skills attained. Strengthening human resource capacity related to institutional strengthening (e.g. how to support CBOs), financial management and technical skills would support the Association itself and allow board members to share these skills with CBOs.

Re-thinking the model: Given the need for adaptation to the evolving institutional context, primacy of the village government and availability of village funds, as well as the extent of challenges faced by the Association model- it may be important to step back

and reconsider the model. Key considerations and suggested areas of discussion by key stakeholders at all levels include:

- Reconsider the range of reasons for commencing the Association model, and the various functions it provides. Consider whether there are other ways in which these ends could be achieved. It may be that some functions can indeed be performed by an Association (e.g. advocacy/voice of citizens and CBOs to LG as regards their rights and water services), but that other functions (e.g. monitoring on behalf of LGs, technical support) could be provided through a dedicated private sector actor or village government. Equally, an Association could explicitly adopt a social enterprise model and charge fees for services, but not operate as a member-based representative organisation. Finally, there could also be roles fulfilled through partnership or cooperation with PDAMs, given their technical skills.
- Reconsider how the relationships of an Association in relation to village governments should be constituted, and what this might mean for an Associations' role relationship to LG. That is, given that a village is an independent polity, Associations may need to adapt to the new situation where the formal line of accountability for provision of rural water services is from a water CBO to village government and then to LG, and as such an Association may need to have a secondary function (for instance to verify monitoring and advocate for repairs) rather than as currently constituted.

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