



Participation as citizenship or payment? A case study of rural drinking water governance in Mali

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ABSTRACT: Community participation in water governance in developing countries is considered important for increasing sustainable access to drinking water and improving broader local governance. The promotion of participation has therefore become a key aim of non-governmental organisations (NGOs). This paper explores community participation in water governance in the rural municipality of Yélékébougou, Mali, and how it is influenced by 'capacity-development' initiatives of the international NGO WaterAid.

WaterAid supports communities by helping to set up new institutions intended to manage water supplies and to promote 'participation as citizenship', the idea that community members are empowered to take part in decisions made on water access. However, the paper finds that the institutions created to promote 'participation as citizenship' focus more on promoting paying for water i.e. 'participation as payment', because lack of payment for maintenance of handpumps appears to be the critical obstacle to sustainable water access.

However, 'participation as payment' as a means of pursuing cost recovery from communities is not working, and also detracts from the possibility of promoting 'participation as citizenship' and the associated potential longer-term benefits to water access and democratisation. The immediate outcome is that access to drinking water is neither sustainable nor equitable.

KEYWORDS: Participation, governance, capacity-development, rural water supply, Mali

INTRODUCTION

The adoption of the participatory paradigm and community-based approach from international development policy into the water sector has become a consensus for ideas around water governance but has been questioned in the academic literature (Cleaver and Toner, 2006) by drawing on wider critiques of participatory approaches (e.g. Cooke and Kothari, 2001; Hickey and Mohan, 2004) and 'designing' institutions (Cleaver, 1999). This paper contributes to this debate by using a case study from Mali to explore local participation in rural drinking water governance and how it is influenced by 'capacity-development'¹ initiatives by NGOs. The study examines the actions of an international NGO (WaterAid) and its local NGO partner organisation, AMEPPE (the Malian Association for Public Education and Environmental Protection), in three villages in the rural municipality of Yélékébougou in western Mali. In the paper I first place the idea of participation as a means of promoting citizenship within the context of the water governance debate, before describing the policy context in Mali, the case study area and the research methodology used. I then use the case study results to explore the realities of community participation in Yélékébougou, firstly in relation to ideas of promoting citizenship, and secondly regarding the promotion of paying for water.

¹ Throughout this article I use the phrase 'capacity-development' in inverted commas to imply that I do not assume that these initiatives do necessarily develop capacity in the ways they are intended to, if at all.

DRINKING WATER GOVERNANCE: PARTICIPATION, CITIZENSHIP AND PAYING

In recent years, there has been belated international recognition that the key problems in achieving access to water and sanitation² for the poor are institutional and political rather than technical. Furthermore, reform of water services can have wider impacts on governance, given the relationship between water and social power (UNDP, 2006). The idea of 'governance' is used to conceptualise "the emerging network of relationships between different sectors and interests ... [which] provide new ways for society to order itself and manage its affairs" (Franks and Cleaver, 2007). For water governance, this includes "the range of political, social, economic and administrative systems that are in place to develop and manage water resources, and the delivery of water services, at different levels of society" (Rogers and Hall, 2003). Water governance and its wider implications are now seen as "critical ... but an enormous challenge" (Plummer and Slaymaker, 2007). Tropp (2007) identifies the key current themes in water governance as complexity and diversity of actors, and new forms of decision making through decentralisation, public-private partnerships, and networks across different scales.

Analytical frameworks proposed for approaching water governance problems (e.g. Plummer and Slaymaker, 2007; Franks and Cleaver, 2007) highlight the need for detailed analysis at local levels to understand the different perspectives and roles of multiple stakeholders in water and sanitation (Mehta et al., 2007). Key questions have emerged about how water governance works at the community level and how it can be supported to benefit the poor (Cleaver et al., 2005), particularly in relation to the potential of local participation (Cleaver and Toner, 2005, 2006). In the history of ideas of participatory development there has been a general shift in thinking amongst development practitioners from project-based 'participation in development' (Hickey and Mohan, 2004) towards participation as a crucial element of citizenship and improved governance more widely; the promotion of citizenship is now a common aspect of development interventions by external agencies (Hickey, 2010).

This paper is concerned with how participatory approaches to water governance instigated or influenced by NGO interventions may lead to longer-term opportunities for 'participatory citizenship' (Gaventa, 2002). Here I acknowledge the wide variety of conceptualisations of citizenship that exist, such as Gaventa's (2002) distinction between the liberal, communitarian and civic republican traditions. Broadly, liberal theories focus on universal rights granted to individuals by the state. Communitarian understandings place more emphasis on social relations and the role of the individual within a community. Civic republican thought prioritises people's identities as active citizens participating in communal affairs and taking a more direct role in deliberative democracy than the representative political systems emphasised by liberal thought (Gaventa, 2002). Activities for promoting citizenship may relate to more than one of these dimensions, although current development interventions often focus on people as active citizens, with participation therefore a key component (for example, Green, 2008).

WaterAid's *Global Strategy 2009-2015* demonstrates an understanding of citizenship which includes both liberal and civic republican aspects, stating that WaterAid will help the poor "to demand their rights to water, hygiene and sanitation services", "to influence [the services'] delivery" and "to take responsibility for developing and maintaining [the services]" (WaterAid, 2009). Similarly, WaterAid's Citizens' Action approach supports citizens in claiming their rights to water and sanitation services, typically through collective action by communities to lobby service providers (WaterAid, 2006a, 2008b). In West Africa, WaterAid's key approach is called the Local Millennium Development Goal Initiative, a strategy of working closely with decentralised local governments to improve the provision of water and sanitation. This includes "empowering citizens" to "be engaged in planning and monitoring" and "resource decisions and accountability" (WaterAid, 2008a). The approach of 'citizen engagement'

² The current literature on water governance treats sanitation either as a separate issue, or one that is intrinsically related to water provision. This article focuses on drinking water governance because of Mali's particular initiatives on this subject.

through "capacity building and grassroots advocacy to stimulate community participation in decision making" is also stated in WaterAid's country strategy for Mali (WaterAid, 2010).

Hickey (2010) notes the sceptical point of view to this trend of promoting citizenship, that it is a process which aims to turn poor people into citizens who are active in their community and the market, but fails to address the underlying causes of poverty. However, others argue that such initiatives for the promotion of citizenship can actually open the space for more progressive debates (Ferguson, 2007). Existing literature on Mali disagrees on whether the promotion of citizenship by external interveners is progressive or not. Smith (2001) considers the extent of international influence on democratisation and ideas of citizenship in Mali, and concludes that many features of Malian traditional society already "encourage norms consistent with democratic citizenship", and that the concept of participatory citizenship promoted is not solely an imported construct. In contrast, Sears (2007) argues that this view is an example of how the elite ruling classes in Mali, including international NGOs, seek to highlight the apparent ways in which existing Malian social norms and ideas of citizenship match democratic participation, to promote a particular neoliberal form of democracy. To understand what is really promoted as citizenship, a detailed understanding of particular cases is needed, particularly concerning the forms and effects of participation that emerge.

Recent work on governance and participation has used the idea of 'spaces' of participation as an analytical tool to explore the ability of different people and groups to participate and influence others (e.g. Cornwall, 2002, 2004; Gaventa, 2004). 'Invited spaces' are those to which citizens are 'invited' to participate (Cornwall, 2002), typically by NGOs or government as part of interventions designed to develop citizenship. In the water sector, these may include community-level water management committees and municipal water user associations (WUAs). 'Claimed/created spaces' include examples such as self-initiated women's groups (Gaventa, 2004). Other spaces may be a hybrid of different types. Previous research for WaterAid on community participation in water governance (Newbourne, 2005) has employed the concept of 'spaces for participation' in analysing the effect of government policy on the engagement of national civil society in Asia.

It is crucial for NGOs such as WaterAid to understand how their activities affect local participation. Previous case studies have highlighted the importance of the role played by external agencies in influencing community participation in water governance (e.g. Cleaver and Toner, 2005, 2006). The influence of external interveners is particularly relevant given that some of the most prominent critiques of participation as an approach to development have centred on the idea of facilitators of participatory processes creating a 'tyranny' of control (Cooke and Kothari, 2001), a possibility relevant to the wider issue of the involvement of external organisations in promoting participation and citizenship.

NGOs often frame their interventions in terms of 'capacity-development' of bodies which are intended to act as spaces for participation and promoting citizenship. For example, at community levels, WaterAid states that its focus is on 'capacity-development' to enable increased public participation in planning, implementing and monitoring water and sanitation projects. Capacity is seen as "the ability of organisations and societies to perform functions, solve problems and to set and achieve goals" (IRC, 2006). Capacity-development in the water sector covers three broad areas (Franks, 1999; World Water Forum, 2009): the capabilities of individuals, the 'enabling environment', and institutional development. The first and last of these relate to community participation as promoted by NGOs, typically using training programmes aimed at individuals, and support to the development of local institutions. The enabling environment refers to policy, legislation and regulation, and so is usually addressed by NGOs through advocacy and lobbying and is not the focus of this paper. Recent reflections on capacity-development in community water and sanitation argue that current initiatives rarely move beyond project-based training activities, which are time-limited and driven by the (external) supplier (World Water Forum, 2009); there is a need for better understandings of the perspectives of local participants themselves.

More detailed critiques have questioned the beliefs that 'institutional design' (Cornwall, 2004) and 'getting the institutions right' (Nemarundwe and Kozanayi, 2003) are appropriate and achievable goals for external actors wishing to help create new participatory spaces and promote citizenship. Instead, the concept of 'institutional bricolage' (Cleaver, 2002; Cornwall, 2004; Sehring, 2009) has been proposed to describe the way that institutions commonly emerge as a mixture of socially embedded (based on particular social and cultural practices) and bureaucratic (based on more formalised beginnings and structures) (Cleaver, 2002). This idea attempts to avoid the false dichotomy of portraying institutions as explicitly 'formal' or 'informal' and highlights the important roles of both local participants and intervening individuals and organisations in shaping, but perhaps not 'designing', water governance.

Based on a study of natural resources management in Tanzania, Cleaver (2002) identifies three aspects of institutional bricolage. Firstly, the 'bricoleurs' (those individuals who are key in shaping institutions) have multiple and changing identities; it is insufficient to characterise people by simple categories such as their gender or main livelihood. Secondly, the process of bricolage makes institutions likely to have multiple purposes, in contrast to the single-purpose bodies that are usually intended by interveners (Manor, 2004), because of the way new activities are co-opted onto existing bodies. Thirdly, Cleaver argues that embedded social values usually lead to non-confrontational ways of solving conflicts rather than the need for open confrontation and sanctions suggested by conventional institutional theory.

Finally, the issue of paying for water is also relevant to the debate on participation and citizenship in water governance. Expecting users to pay the direct costs of operation and maintenance (O&M) is now considered necessary in most contexts in rural sub-Saharan Africa to achieve sustainability of community water services (Harvey and Reed, 2004). This perceived need for communities to contribute to the costs of their water supplies has its origin in global policies regarding water as an economic good that emerged in the late 1980s (Katko, 1990). Allen et al. (2006) use case studies of water supply in peri-urban areas to examine how this trend of the poor being considered as consumers interacts with the citizenship aspect of water governance. Although their focus is mostly on the narrower elements of citizenship (claiming the right to water from the state), they begin to consider the link to collective action and participation in decision making, and argue that this could be a way for the poor to express their rights as citizens rather than solely being paying consumers of water. However, Jaglin (2002) takes a more critical view in another peri-urban case study, arguing that the promotion of participation can become a form of passing on costs from water companies to the poor. In Jaglin's example, participation is seen as a way of forcing users to undertake unpaid work to make up for their lack of cash, rather than a more progressive form of promoting citizenship.

THE MALI CONTEXT, CASE STUDY AREA AND RESEARCH METHODOLOGY

In addition to needing significant improvements in water provision – official estimates suggest that only 50-70% of the population has access to safe drinking water (WaterAid, 2005; WHO/UNICEF JMP, 2008a, 2008b) – Mali is an important case study within debates on water and governance due to the country's political context of gradual and ongoing decentralisation and the new forms of water governance intended to result from this. A series of decentralisation laws in the 1990s culminated in the creation of 703 *communes* (municipalities) in Mali, the lowest level of constitutional government (Doumbia, 2009), each composed of villages or small urban neighbourhoods. Municipalities are led by democratically elected councils, who elect a mayor from among the councillors. Above the communes, there are 49 *cercles* and 8 regions, each headed by members who are elected from the councils of the level of government immediately below (Le Bay and Loquai, 2008).

The status of decentralised government in Mali is of particular concern to the water sector because responsibility for the provision of basic public services has now passed to the municipalities. This specifically includes provision of drinking water, in accordance with the legal requirements set out in

the Water Code of 2002 (République du Mali, 2002). One of the key challenges identified for decentralised governance in Mali is the slow transfer of financial and technical resources from central to local government (Djiré, 2004; DANIDA, 2006; Le Bay and Loquai, 2008; Doumbia, 2009), resulting in NGOs such as WaterAid and its partners supporting the provision of public services at local levels. WaterAid in Mali works through local NGO partners, and is also beginning to work directly with municipal governments. This support is focussed on 'capacity-development' at local government and community levels to enable effective planning, financing and operation of equitable water and sanitation services. This 'capacity-development' involves the NGO partners of WaterAid in Mali creating and supporting village-level Water Management Committees (WMCs) for the "management of water and sanitation facilities and social mobilisation, to achieve sustainable work [and] governance at community level" (WaterAid Mali, 2008). Committees are intended to have balanced representation from men and women and to act as a space for decision making on water issues at village level, as well as collecting payments from users to cover O&M costs. Representatives of the committee of each village are also required to form a municipal water user association (WUA) which should represent users to the municipal council and other actors such as NGOs, and consider issues of access to water across the municipality as a whole, not just in individual communities. This can include pooling revenues collected from different villages to create a municipal-level maintenance fund. Once such institutions are in place, most capacity-development takes the form of training sessions which explain the roles and responsibilities of different actors, and discuss how different institutions can promote participation and help contribute to increased access to water. For members of Water Management Committees and WUAs, this also includes training sessions on hygiene promotion and the mobilisation of financial resources for O&M of water infrastructure.

In Mali, the Water Code was developed in line with the global policy consensus of cost recovery from users, and states that access to public water services must be paid for. In rural and semiurban areas, there should be partial recovery of the investment costs and full recovery of operating costs, if possible (République du Mali, 2002). Official policy from the National Department of Hydraulic Infrastructure is more specific: users should pay for maintenance, management, replacing parts less than 20 years old, monitoring, and any relevant taxes. However, a maximum rate is set for the first 20,000 litres per month consumed by a household as a 'social tariff'.³ There is scope for different price-setting and payment mechanisms within the national policy guidelines, either monthly tariffs or payment per volume collected. In reality, there is also a wide range of payment practices which fall outside official policies.

The research was undertaken in three villages (Fansiracoro, Guily and Yélékébougou) in the rural municipality of Yélékébougou, Mali. The municipality is centred on a large village, also called Yélékébougou, situated about 50 km away from the capital of Mali, Bamako, on the main (tarmac) road towards the town of Kayes. Yélékébougou commune is part of the cercle of Kati and the region of Koulikoro. The commune comprises 17 villages and 11,134 inhabitants,⁴ 91% of whom are from the Bambara ethnic group (the main ethnic group in Mali) with the remainder made up of Peul and Malinké (République du Mali, 2008). The livelihoods of almost 90% of the population are based around agriculture or pastoralism. Less than 40% of boys and 30% of girls aged 6 to 15 years regularly attend school (ibid). Surveys suggest that only 30-45% of the population of Yélékébougou uses safe drinking water, below the national average for Mali (WaterAid, 2005; République du Mali, 2008; WHO/UNICEF JMP, 2008a 2008b). WaterAid has been working in the Yélékébougou commune through its local NGO partner AMEPPE since 2005.

The main research methods used were semi-structured and narrative interviews because of the subjective viewpoints and interpretations being sought (Silverman, 2005; Flick, 2006). Prior to individual

³ This maximum tariff is 500 CFA (about 1 US\$) per 1000 litres, i.e. about 10 CFA (0.02 US\$) for a 20 litre bucket (DNH, 2007).

⁴ Population figures used by the municipality do not include children (under the age of 16 years). Total figures including children are estimated to be about 50% higher than those quoted.

interviews, focus groups were conducted with WMCs, sanitation committees and women's associations to introduce the research to the community and help identify key themes for further discussion in individual interviews (Loftus, 2005; Beazley and Ennew, 2006).

Local categorisations of poverty and well-being were originally intended to be determined through participatory methods, which could then be used for purposive sampling of individual interviewees according to wealth as well as gender (Cleaver and Toner, 2005, 2006). At the time of the field work, AMEPPE was already facilitating discussions to categorise multiple levels of poverty using indicators determined by the group. However, this proved almost impossible. Participants only agreed on two broad levels of wealth: 'rich' (access to food, water, sanitation, education and health) and 'poor' (lack of access to these). I decided not to attempt a similar exercise in the study villages in case this jeopardised my ongoing relationships with the villagers and AMEPPE. Instead, I relied on the interpretations of the 'gatekeeper' in each village to identify the one or two 'rich' families in each community. This less-nuanced insight into wealth and therefore its influence on participation was one of the key limitations of the methodology. Its relevance to the research results and analysis is discussed in the next section.

The field research took place over 6 weeks: 5 in May-June 2009 and 1 of follow-up visits in September 2010. Overall, six focus groups were conducted: three each in Guily and Fansiracoro. These were held with the WMCs, the sanitation committee and a women's association in each village. Altogether 62 semi-structured interviews were performed, 49 taking place at village level. Eight interviews were also performed with members of local government and associated commune-level committees, and five interviews with staff from WaterAid and AMEPPE. Interview notes were later coded and analysed with the help of qualitative analysis software.

'PARTICIPATION AS CITIZENSHIP'

In this section I discuss what the field research shows in relation to the theme of participation as an element of improved governance: 'participation as citizenship'. I examine the forms of participation that exist regarding water governance, and find that the immediate concern of the council and NGOs is the promotion of paying for water, because lack of payment for O&M appears to be the key obstacle to sustainable access to water, and the government and NGOs work according to international policies of seeking cost recovery from users. However, as a means of promoting payment for water, they are using forms of participation which were originally intended to promote citizenship. Therefore, in the subsequent section of this article I consider the issues surrounding this idea of 'participation as payment' and what this form of participation entails.

Governance of handpumps: WMCs and alternatives

The two most common sources of drinking water used in the case study villages are handpumps fitted to drilled boreholes (usually constructed by a private contractor with funding provided by an NGO) and traditional shallow wells (hand-dug by members of the community). Traditional hand-dug wells are typically used by members of the same family, so the analysis here focuses on handpumps as an example of a common property resource whose governance supposedly involves wider community participation.

However, despite the involvement of AMEPPE, no handpump in the three villages is managed by a WMC in the form imagined by WaterAid. The two handpumps in Fansiracoro are the only ones managed by a committee which has specific responsibility for water management in the community. The two handpumps in Guily and the seven in Yélékébougou are each managed by one or two individuals. Even though nominating one individual for day-to-day overseeing the pump might be expected, in these cases there was no wider committee in place for decision making. Reasons for these people assuming responsibility included: living near the handpump, being identified as trustworthy by

the village chief, or being members of a committee which already existed for another purpose, such as managing the school, clinic or market.

This highlights the difficulty for NGOs of 'institutional engineering' (Nemarundwe and Kozanayi, 2003): creating new resource management committees or structures in a community without sufficient consideration of existing forms of governance. The only functioning WMC, in Fansiracoro, had already been set up in a similar form by the community before AMEPPE worked in the village, emerging from the traditional agricultural association typical of a rural Malian community (Jonckers, 1994), which in this case had been given additional responsibilities by the village chief. However, members of the WMC feel that AMEPPE's 'official' endorsement lends further legitimacy to the committee's activities. This highlights the processes of 'institutional bricolage' that can take place in blending a socially embedded structure with new elements of formalisation. However, Cleaver (2002) observes in Tanzania that legitimacy of the new institutions emerging from institutional bricolage usually derived unconsciously from their association with traditional norms. This case in Mali illustrates that the process can also occur in the other direction: the new 'official' aspect of increased formalisation by an NGO can add extra legitimacy to a traditional association.

Despite the addition of the more formal status endowed by an NGO, the WMC does not function according to the wishes of WaterAid and AMEPPE. In particular, women are listed on the official membership of the WMC but are not considered to be part of the committee and play no role in decision making (see also Sultana, 2009). Also, WMCs are intended to serve each village, but, except in Fansiracoro, management was based around each handpump.

Local understandings of the role of WMCs, and the effects of 'capacity-development'

It emerged in interviews that community members and those who are on WMCs themselves view the promotion of hygiene as the primary function of WMCs. However, just as many community members simply did not know what the WMC was or what it did. This suggests that awareness has not spread as widely as hoped for but is also a reflection on the general lack of functioning committees. Members of WMCs and those who were part of the council or other commune-level bodies see a further role of the WMC as collecting money for O&M of handpumps.

This focus on the promotion of hygiene can partly be explained by the 'capacity-development' initiatives run by AMEPPE and aimed at members of WMCs, training sessions which include sections on hygiene promotion, the mobilisation of financial resources for maintenance of water infrastructure (intended to be from users paying monthly tariffs or per volume collected at the water point), and how the roles of committee members relate to participation of the wider community. The hygiene promotion aspects of the training become the most publicly visible face of WMC members because this is the easiest role for them to perform in their communities: it involves simply telling other people that they should collect, transport and store water hygienically. The other roles for which WMC members receive training – raising money and promoting participation – are more difficult to achieve.

Other forms of 'participation as citizenship' at village and commune levels

Since WMCs do little to promote wider participation of the community, here I explore what insights can be drawn from other forms of participation, at the level of both the village and the municipality. It is also helpful to consider how types of participation differ in order to highlight the structural and agency factors influencing participation in community activities in general and water governance in particular (Cleaver and Toner, 2005, 2006; Franks and Cleaver, 2007; Plummer and Slaymaker, 2007). To help analyse types of participation and possible influences on participation, Cleaver and Toner (2005) developed a "typology of participation in collective activity" based on a community-based water management study of a village in rural Tanzania. They identified four types of participation: livelihood (no participation in formal civil activities); social (e.g. religious or social groups); public participation (e.g. the Village Council, school board or political committees), and leadership (e.g. Village Chairman,

religious leaders, or the water committee). Here I consider these as increasing levels of 'participation as citizenship'.

The main forms of participation in activities other than water governance described by the research participants in this study were: village-wide women's associations; associations of men or women from the same family; other family or trade associations, such as blacksmiths; other committees to liaise with NGOs, such as sanitation or erosion committees; farmers' groups, and young people's associations. However, these typically blur the three categories of livelihoods, social and public participation because associational activity in rural Mali continues to be influenced strongly by its roots in traditional agricultural associations organised according to gender and family (Jonckers, 1994). This straddling of categories illustrates the socially embedded nature of most forms of participation and highlights the difficulty for NGOs in Mali of promoting spaces of public participation, such as WMCs, that do not necessarily have their roots in previous social participation. The most important 'spaces' of participation at community level are those where decisions are made on behalf of the village. This 'leadership' category of participation (Cleaver and Toner, 2005) in Fansiracoro and Guily is primarily composed of the traditional village chief and his advisors, the most senior male family chiefs.

At the commune level, three other key spaces of participation exist for water and sanitation: the communal council, the WUA and the 'platform'. Under the legislation of decentralisation and the Water Code, elected councils hold overall responsibility for provision of drinking water in the commune but must delegate operational management to more specialised bodies (République du Mali, 2002). In rural areas, it is intended that the operator in each municipality is a legally constituted WUA, composed of representatives from each village in the municipality, which represents users to the municipal council and manages the existing water supply infrastructure. This management aspect is supposed to entail collecting at least some revenues from the users in each village which can be pooled to create a municipal-level maintenance fund, built up over a number of years. This enables risk to be shared in the case of an expensive repair being needed which could be beyond the means of the users of that water point alone.

In the municipality of Yélékébougou, the WUA was initiated by AMEPPE in 2006. However, the Association has not achieved official legal status because those nominated to be members have never gathered to sign the relevant paperwork. Instead, the WUA barely functions, formally or informally. Although there are potential benefits of a functioning WUA which could link water system financing and maintenance across villages, and provide a means of representation for water users to the council and other actors, there is no history of water governance acting across these levels in the commune so there is no socially embedded structure which the WUA could build on. The WUA has also received limited support from AMEPPE to move beyond this stage, so it is difficult to assess whether this attempt at 'institutional engineering' could overcome the apparent mismatch with existing levels of governance if there was more support from NGOs. With no structured membership system of the WUA, the opportunities for community members to express views at a municipal level are instead via the village chiefs and WMCs. In fact, some councillors and AMEPPE staff think that the WUA's representative role should be more in the other direction: persuading the public to accept the 'need' to pay for water because people are seen as more likely to listen to other water users than to the council. This highlights the phenomenon of institutions which on paper promote participation as citizenship being used in reality more for promoting payment for water. I discuss this idea of 'participation as payment' further in the next section.

In addition, WaterAid's local partner NGOs across Mali have recently begun to help communal councils set up further 'platforms', which take the form of a subcommittee to promote dialogue and transparency between water users, service providers, and the communal council, in particular for the planning and financing of new water supply facilities (a different role to the WUAs' responsibility for

existing water services).⁵ The platform is designed to help the water users and the communal council check on the activities of the service provider by promoting dialogue between the different actors. However in most rural areas the intended service provider is itself a WUA, which should already enable the participation of users in decisions and have a legal contract with the council. Therefore, there is some overlap between the role of the WUA and the platform. The platform in the municipality of Yélékébougou was set up by AMEPPE and the council in 2008 to "act as an interface between the commune council, populations and service providers to resolve problems related to the access of water and sanitation services" (Plateforme Locale de Concertation de Yélékébougou, 2008). The platform consists of nine members selected to represent a number of stakeholders (such as the council, women, young people and water users). At the time of this research, the platform had agreed its statutes, and been involved in helping organise, with AMEPPE and the council, annual public hearing days for citizens to come and ask questions to council members about public services in the commune. Therefore, the 'institutional engineering' of the platform seems to have had more effect than the attempts to create the WUA in Yélékébougou; however, this may be due to the close support given to the platform by AMEPPE in organising the public hearing days. It is unsure yet what activities the platform will pursue independently.

Factors influencing 'participation as citizenship'

The interviews and focus groups showed that the ability of individuals to engage in the forms of 'participation as citizenship' described was affected by four key structural factors (age, level of education or literacy, gender and geographic location), agency factors, and 'capacity-development' from AMEPPE.

The first key structural factor affecting participation as citizenship is a person's age. Being among the eldest in a family, association or village can help people into positions of leadership in participation (e.g. advisors to the village chief, president of women's association, chief of the village). However, age can also exclude people from forms of participation, for example when they become too old to work and therefore cannot pay the membership fees for entry into women's associations or work as part of farming associations. Young people's associations remain significant opportunities for participation, as is traditional in Mali (Jonckers, 1994). However, younger people still tend to defer leadership and decision making to the more elderly in the village, since Mali is considered a gerontocratic society (Harris, 2006).

Secondly, an individual's level of literacy has a significant influence on his/her ability to participate as a leader or on public committees, in particular those where they act as a liaison with NGOs. AMEPPE requires that 'relays' (people from a WMC nominated as the main liaison with AMEPPE) are literate enough to record simple household data from their villages and return the information to the NGO. This excludes many people from the role and reduces the opportunities for women to participate because women in general receive less education than men in Mali.

Gender has been widely noted as an important factor influencing participation, particularly in rural water governance (e.g. Cleaver, 1999, 2000; Cleaver and Toner, 2005, 2006; Singh, 2008; Sultana, 2009). In all three villages studied, activities and responsibilities concerning access to water are divided by gender: women fetch water for domestic purposes and keep pumps clean; men dig wells, fix pumps and collect water for animals or for making mud bricks. The gendered roles were used by research participants to explain why women were not part of WMCs (despite being listed on the official record of the committee), because it is the job of men (and the committee) to bring water 'to the village', but the task of women task to bring it 'to the home'. 'Participatory exclusions' (Sultana, 2009) such as this mean

⁵ In general, the actual construction of new infrastructure should be performed by a contractor commissioned to do so by the communal council via a legal agreement (in a similar arrangement to the way the council is supposed to contract the WUA for ongoing operation of infrastructure). The role of the platform for new infrastructure is to promote the wider participation of water users and other stakeholders in decisions on what infrastructure is built and where.

that women's ability to participate is severely reduced even when the NGO or local government considers them as 'officially' included.

Finally, geographic location is an important structural factor affecting people's ability to participate. The commune of Yélékébougou is officially composed of 17 villages, but many villages are partly made up of smaller hamlets. Some community members living in the hamlets of Guily and Fansiracoro complained that they were often left uninformed by village chiefs or those participating in decision making in the main village. In addition to this, it can be time-consuming and difficult for those living in villages outside the central village of Yélékébougou to participate in commune-level meetings and events because of the need to travel up to 20 km, often on foot.

Additionally, wealth has previously been identified as an important structural factor in explaining participation in collective activity and water management in Mali (Gleitsmann et al., 2007) and other countries in sub-Saharan Africa (Cleaver and Toner, 2005). Given the methodological difficulties already described, a detailed exploration of the influence of wealth on participation was not possible during this study.

Ideas of agency such as responsibility, duty and a desire to help their community were all motivations expressed by participants in this research, highlighting the way that participation is also shaped by personal motivations and responses to particular structural opportunities and constraints (Cleaver and Toner, 2005). As Cleaver and Toner noted, the ability to draw on linking social capital (e.g. Halpern, 2005), in particular by using connections to external development organisations, has a significant influence on a person's ability to participate. However, in this study an individual's social capital is affected structurally by their level of education because NGOs prefer to work with more literate representatives if possible. Structural factors seem a greater constraint than the opportunities emerging from motivated agency.

As previously discussed, the 'capacity-development' from AMEPPE at village level takes the form of setting up WMCs and then providing training sessions for some members of WMCs on the promotion of hygiene, mobilising financial resources, and promoting participation of the community. While this has had some effect on the promotion of hygiene, it does not seem to have helped promote wider participation of community members. Like the training sessions for WMCs, 'capacity-development' initiatives aimed at commune-level groups target both individual capability and institutional development. Training on hygiene and water treatment was provided for members of the WUA, with attempts at institutional development made by AMEPPE in drawing up the official statutes, even though the statutes have yet to be signed. Therefore 'capacity-development' via the WUA has had little effect on participation. AMEPPE's work supporting the platform in organising public hearing days with the council has been more successful, although this form of participation is still limited for most people by the factors described above, in particular geographic distance from the commune's central village of Yélékébougou, where these events are held.

Key outcomes in terms of sustainability and equity of water access

The immediate practical measure of the success of the forms of participation discussed so far (apart from their possible longer-term influences on citizenship) is whether sustainable and equitable access to drinking water is achieved. Although sustainability is considered to include technical, institutional and environmental aspects of the water supply (Schouten and Moriarty, 2003), the key indicator of sustainability of a handpump system, in this case supposed to be the WMCs and WUA, is a combination of technical and institutional: whether the handpump is maintained in good working order and breakdowns are repaired promptly. Four out of eleven of the handpumps studied were broken at the time of the research in May-June 2009 and five were broken during the follow-up in September 2010. Overall, seven of the eleven handpumps were broken for periods of several months between May 2009 and September 2010; three handpumps worked without any breakdown throughout the period; and one other had a minor breakdown. About one-third of handpumps throughout Mali are estimated to be

broken (WaterAid, 2006b). Wider estimates from countries in sub-Saharan Africa suggest failure rates of 30% to 60% (Harvey and Reed, 2007). Therefore, it appears that the functionality level of handpumps in the research area can be considered typical of rural water systems in Mali and possibly of sub-Saharan Africa more widely. However, it is important to note that this is still a relative 'snapshot' of the pump status, and there is a current lack of detailed information on downtime for water systems and the effect this has on individuals' access to water. However, the outcome for access to water cannot be considered sustainable, even given the lack of more detailed data.

In terms of equity, various factors are likely to cause differences in the ability of individuals to access water, including the structural issues affecting participation such as age and gender. However, geographic location is currently the most important issue affecting equity of access in the areas studied, both directly and indirectly via its influence on participation. The clearest example of this is the situation regarding the older of the two handpumps in Guily. The pump is located outside the main village of Guily, nearer the hamlet of Maribougou, and so is normally the main source of water for those living in the hamlet. However, since Guily now has a new pump close to the main village, the inhabitants there do not need to use the old pump, which was becoming unreliable. Instead, the village chief from the main part of Guily and his advisors made the decision to lock the old pump and nominate a keyholder to minimise its use and the likelihood of damage, hoping to prolong its lifespan without paying for more repairs. However it can be difficult to find the keyholder because he is often working or away from his home. In addition, some people in the hamlet of Maribougou had been poorly informed: they thought that the old pump was broken and this was the reason for it being locked and apparently out of use. So inhabitants of the hamlet are using well water for drinking, which they consider to be of lower quality than the pumped water.

Overall, the key problem is that handpumps frequently break down and there is often insufficient organisation or financing at either community level (from the WMCs organising user fees) or commune level (the WUA) to pay for maintenance and repairs. The effect on access to drinking water for individuals varies, especially according to geographic location and the existence/location of alternative sources. The village of Fansiracoro is currently more successful at maintaining handpumps than the villages of Guily or Yélékébougou. Taking these observations together, it is clear that the current systems for supplying drinking water from handpumps are neither sustainable nor equitable. The response to this problem from AMEPPE and the council appears to be using the institutions which were originally intended to promote participation as citizenship to focus more on these bodies' other objective of promoting paying for water, in an attempt to address the lack of local financing. The next section will explore this idea of 'participation as payment' in more detail.

'PARTICIPATION AS PAYMENT'

Here I examine the different ways in which people actually pay for water in the three villages studied, showing that the policy imperative for communities to pay for water and the practical need to finance O&M are being addressed through attempts to promote 'participation as payment' rather than the more widely-stated aim of 'participation as citizenship'. I use 'participation as payment' to mean that the forms of participation originally intended to promote citizenship are now being used primarily to promote paying for water, in line with their function of fund-raising for O&M. Ultimately, neither form of participation is currently leading to the desired effects of sustainable and equitable access to water and democratic decentralisation. However, it is difficult to assess the actual prospects for promoting citizenship in the case study because the emphasis on payment promoted by these institutions is stronger than the promotion of citizenship participation.

'Participation as payment' in practice

As described in the context and discussed in relation to capacity-development of WMCs and the WUA, the mechanisms promoted in policy for cost recovery are payment by users via monthly tariffs or per volume collected at the water point. In reality, the forms of payment promoted vary in the different villages and at different handpumps. In Fansiracoro, the WMC organises men to participate in days of weekly collective farming in the rainy season. The payment they receive from the landowner (typically 5000 CFA⁶ for a day of farming) is put in the WMC 'account' for maintenance of the two handpumps in the village. Over the rainy season the total collection is about 50,000 CFA. However, this is often not enough to last all year and pay for all breakdowns, so people are also asked to pay up to 500 CFA each while collecting money for a breakdown.

In Guily, different payment policies are in place for the two different handpumps in the village, broadly based on the idea that people should pay more for higher volumes of water. The older of the two handpumps is kept locked and people must find the keyholder to unlock it when they want to take water. Prices are set at 50 CFA for an oil drum of water (i.e. for the larger amounts needed for making mud bricks or for watering animals, rather than solely for drinking water for human consumption). However, some people have also paid for smaller amounts. Collections also take place when repairs are needed (25 CFA upwards per person). In reality, the pump is hardly used because it is locked and people think it is broken or cannot find the keyholder. Only 7500 CFA had been collected, which was thought by the keyholder to be sufficient only for very minor repairs. At the new handpump in Guily, no payment is charged. According to the members of the water management committee, this is because the Italian NGO who installed it said that it was free for the village. The committee said that it intends to organise collections if repairs are needed. However, this new handpump broke down during the first period of the field research, and was still broken in late 2010, with no plan in place for collecting money for a repair.

In the village of Yélékébougou, 'participation as payment' for drinking water has been promoted to an extent (partly by those managing pumps directly, and partly by members of the council). At three pumps, those managing the handpumps had tried to implement similar arrangements to those in Guily where people pay when they need large quantities of water, for non-drinking purposes. However in practice these systems are not enforced – no users pay for drinking water and very few pay for non-drinking uses of water.

None of the payment systems observed is sufficient to sustain the O&M costs of the handpump. The closest to achieving this goal are the two handpumps in Fansiracoro. None of the systems takes the form of regular tariffs or point-of-collection payments that are the methods preferred by government and NGO policy, and promoted by AMEPPE through the training sessions for WMCs.

The community of Fansiracoro is more successful at raising money for O&M for two key reasons: a greater dependence on water from handpumps than in the other villages, and a more active and effective WMC. In most of Fansiracoro there is hard rock relatively close to the surface of the ground so it is difficult to dig traditional wells to a depth sufficient to obtain water. Therefore, if one of the handpumps breaks down there is a strong incentive to ensure it can be repaired as soon as possible because there is little alternative. Schouten and Moriarty (2003) note a similar example of high cost recovery where alternative water sources are scarce in a case study from South Africa.

The second reason for greater success in Fansiracoro is the way the WMC has formed from a process of 'institutional bricolage' to create a group which combines traditional strengths of collective action with a new purpose of raising money for the operation of water supplies. As previously discussed, the process of 'institutional bricolage' in this case has also led to a traditional group gaining further legitimacy through the endorsement of an NGO, in contrast to the observations of Cleaver from a case study in Tanzania where legitimacy tended to be conferred by the traditional roots of institutions which

⁶ 460 CFA (West Africa Franc) = 1 US\$ (United States Dollar) in June 2009.

had formed by bricolage. In this Mali case study, while the 'social embeddedness' (Cleaver, 2002) of the system appears an advantage in the practical sense of fund-raising and promoting participation as payment, it can also reproduce existing gender divisions and therefore is less effective at developing participation as citizenship.

The village of Guily highlights the struggle between traditional decision making and externally initiated activity. Instead of a process of bricolage leading to compromise of different institutional possibilities as observed by Cleaver, there is conflict as described previously between the family chiefs making decisions based more on the needs of the main village than on the nearby hamlet, while AMEPPE seeks to promote more equitable arrangements via a WMC. Again, this is an example of the difficulty of institutional engineering where creating a new form of governance would mean existing forms losing some of their powers. Here, the WMC does not function except for two men who raise awareness of hygiene issues among the villagers. Participation as payment occurred briefly when people from the nearby hamlet paid for water from the old pump for a short time. However, they were not able to participate in decision making because of the lack of a functioning WMC to enable participation as citizenship. In fact, the residents of the hamlet were excluded from decision making regarding payment and locking of the pump to the extent that people in the hamlet do not think that it is possible to use the pump at all. Yet the motivation to change this is much lower than in Fansiracoro, because the hamlets around Guily have better access to traditional wells and so there is less dependence and incentive for being part of an ongoing institution to govern the handpump resource (Agarwal, 2001). This example contrasts with one of the ideas proposed about 'institutional bricolage' (Cleaver, 2002), that the process tends to lead to non-confrontational conflict resolution. Instead, in this case the conflict has only been averted insofar as the residents of the hamlet hardly use the handpump at all.

Guily also demonstrates the importance of the agency of particular individuals in shaping forms of institutions (Cleaver and Toner, 2005). The village chief in Guily is far more proactive in decision making than his counterpart in Fansiracoro, for example by leading the decision to lock one of the pumps in Guily as described earlier. The Fansiracoro chief generally accepts and endorses recommendations from the WMC, who are more likely to promote views from AMEPPE. Further insight into the importance of individual agency emerged in Guily when it was discussed that some people had attempted to raise money for water infrastructure via collective farming, but had lost interest and motivation when the most active individuals involved left the village.

Yélékébougou is the village that has received most exposure to the idea of participation as payment because most council members live in the village of Yélékébougou and have more frequent contact with water users in the village, including telling people to pay after a pump breaks down. However, this has rarely led to increased payment except for some people paying for non-drinking water purposes such as giving water to animals or using water to make mud-bricks. As in Guily, most people are not fully dependent upon one handpump source because they can either use other pumps (even if they dislike travelling further) or traditional wells (even if they consider the quality of well water to be lower). Both these options were usually seen as preferable to paying for handpump repairs.

Other general issues include an awareness that AMEPPE or other organisations sometimes do pay for repairs to handpumps. This leads to an inclination to focus efforts on petitioning NGOs for assistance rather than collecting funds from the users. AMEPPE considers that most 'low-cost' repairs (from about 5000 CFA to 50,000 CFA i.e. about 10 US\$ to 100 US\$) should be covered by the communities, and its annual training sessions for WMCs encourage community-level fund-raising. But AMEPPE also plans its own budget to include about three major rehabilitations of handpumps per year (including replacement of major parts, handpump surrounds and soakaway), costing up to 800,000 CFA (about 1,700 US\$) each. Communities are not expected to contribute to this. If there are funds remaining in the budget after this, AMEPPE may also pay for some smaller repairs.

However, there is no structured approach to assessing what level of expense between very small repairs (5,000 CFA or so) and major rehabilitations (up to 800,000 CFA) can or cannot realistically be

raised from the users; AMEPPE considers the problem to be unwillingness rather than inability to pay. The evidence from users of the handpumps in Fansiracoro suggests that organised committees currently raise up to 50,000 CFA per year. This can be placed in the context of WaterAid surveys that suggest annual average household income in the area is about 170,000 CFA (370 US\$). However, it is important to note that there is no accurate data recorded on long-term costs of O&M – Fonseca et al. (2010) identify this lack of information as a widespread problem in rural water services – or on household finances, so it is difficult to draw conclusions regarding people's ability to pay.

The attitude of AMEPPE and the council is based on a belief that traditional rural views on water being 'free' can gradually be changed by education until users accept the need to contribute to cost recovery. However, Page (2005) has shown from research in Cameroon that the commodification of water is not an inevitable and irreversible process, contrary to the view commonly espoused in the global policy debate. Instead, water may be commodified or de-commodified at different times according to what is considered socially acceptable. This suggests that the belief of AMEPPE and the council in Yélékébougou in a slow but inexorable 'sensitisation' of the population to payment through participation is unfounded. It seems particularly unlikely to develop in this way when there is limited ongoing support from these external actors except to continually remind people that they 'must pay'.

The issue of gender emerges as significant in participation as payment as well as citizenship. When people do pay money for water (either directly or via repair costs), it is viewed as a male responsibility. Fees are collected per household or per married man. Rural Mali is a polygynous society and men in Yélékébougou typically have at least two wives each (République du Mali, 2008), who tend to look after their own money rather than pool it into a household income (Harris, 2006). Occasions when women also contribute to water payment are considered highly exceptional in the commune. Yet as discussed below, women appear to be far more organised at collecting and pooling regular payments in the way that NGOs intend water to be paid for. O'Reilly (2006) uses a case study in India to argue that an NGO there aimed to change women from 'traditional' to 'modern' in order to promote payment for water. This is an example of how external actors can seek to make 'participation as payment' desirable and accepted by remaking women (O'Reilly, 2006) or communities (Page, 2003) as agents of commodification. Given the problems surrounding the promotion of participation as payment for water, the final part of this section explores insights from another form of participation as payment which already exists in all three villages: women's associations.

Lessons from another form of 'participation as payment': Women's associations

Women's associations in Fansiracoro, Guily and Yélékébougou traditionally collected money from their members every month which would then be given as a lump sum to one member or family. In recent years, each group has received training and support from outreach workers of another local NGO to develop revolving micro-credit schemes amongst their members. Typically, each association has up to 25 members who pay small subscription fees every week and are then able to take up to two loans from the group fund over the course of a year. Loans are typically used for trading goods in the market or 'emergency' expenditure such as unexpected medical costs. The associations are often based around family groupings and/or composed of smaller family groups which might save money in more traditional ways.

The key difference with institutions for governing water is that the women are not managing a natural resource, and the money they pay is at some point returned to them as a loan rather than being payment towards a service. However, some aspects of the organisation of women's associations such as this could provide relevant lessons for participation and payment in water governance as well.

For example, like the WMC in Fansiracoro but unlike the management scenarios in Guily and Yélékébougou, the women's associations are a mixture of 'public' and 'invited' spaces. Each group is based around the form of a traditional women's group that might meet to undertake collective activities such as farming, making clothes or producing butter (Jonckers, 1994). The associations have

then been encouraged and supported by NGOs to widen their activities, principally to include revolving micro-credit schemes. The NGOs attended weekly meetings with the women's group at first, and then began to phase out their involvement as groups became more confident at organising the schemes on their own: a possible lesson for NGOs to give longer-term support to water committees too.

CONCLUSIONS

The promotion of community participation by AMEPPE and the local government in Yélékébougou is currently focused on 'participation as payment', i.e. the institutions created to promote 'participation as citizenship' actually focus more on promoting paying for water. This is because lack of payment for O&M of handpumps appears to be the critical obstacle to sustainable access to water, and NGOs and government act in line with the global policy consensus of recovering costs for O&M from the users themselves. However, this means of pursuing cost recovery from communities is not working and does not solve the problem of pumps remaining broken for months at a time. Furthermore, the focus on 'participation as payment' tends to undermine 'participation as citizenship' and the potential longer-term benefits to access to water and democratic decentralisation expected by NGOs. 'Participation as citizenship' is also currently constrained by existing decision-making and governance structures and, for most individuals, by a combination of structural factors (age, gender, education and geographic location). As a result, the role of water management committees within this scenario ends up confined to promoting hygiene and payment rather than wider community participation.

There is a lack of detailed data on long-term costs of rural water supply which means it is difficult to judge whether payment of all O&M costs by communities is realistic or not. If the ability to pay may sometimes be a constraint, willingness to pay is probably a more crucial issue, with incentives strongly dependent upon factors such as the existence of alternative water sources, the expectations that NGOs might repair the systems, or perceived links between payments and actual benefits. Some respondents identified lack of trust of the person managing the pump as a reason for reluctance to pay, although only at two of the water points.

The problem of achieving neither 'participation as citizenship' nor 'participation as payment' is also related to how the local institutions which are intended to promote participation emerge. This research supports the idea that 'institutional bricolage' occurs as socially embedded forms of activity combine with more formal and 'modern' arrangements (Cleaver, 2002), to produce institutions which may not have the effects originally intended by external interveners. The practical relevance for interveners such as NGOs and local government who aim to create new institutions and 'invited' spaces is to accept the difficulty of designing such spaces, acknowledge the effects of social embeddedness, and assess if these spaces can become useful hybrids with local legitimacy and representation (see also Waddington and Mohan, 2004). In this I agree with Cleaver (2002) that development interventions should seek ways of complementing or reinforcing the positive aspects of existing socially embedded arrangements, rather than attempting 'institutional engineering' (Nemarundwe and Kozanayi, 2003) based on idealised ideas of community collective action. In one of the villages of this case study, AMEPPE has acknowledged and supported the existing socially embedded agricultural association which was managing the water points. In the other villages, power lay with individuals such as the village chief and there was limited support from AMEPPE to create water management committees which could be more representative. The spaces of participation emerging were limited to one or two individuals, almost always male. At commune level, setting up a WUA has proved difficult when there is little existing socially embedded structure to draw on which might connect WMCs throughout the municipality, and the WMCs which should provide representatives to the WUA barely exist themselves; there is a mismatch between the intended scale and operation of the WUA and the existing forms of power at village level. Setting up the platform at municipal level has enabled some promotion of dialogue between different actors through public-hearing days, but its effects on participation are still limited by the structural factors identified above. In terms of capacity-development for managing resources and finances, the activities of other

community-based groups such as women's associations show that existing village institutions can have the capacity for effective financial management and administration of regular payments, when closely supported by NGOs. But this has yet to be achieved for water management in the case study area.

The immediate outcome of failing to achieve 'participation as citizenship', 'participation as payment' or effective hybrid spaces for water governance is that access to drinking water is neither sustainable nor equitable. However, there is currently insufficient data on overall pump downtime, the direct impacts (for example, drinking water of poorer quality, travelling further to another source, using lower quantities of water) and the indirect effects (for example, health problems, less time for pursuing livelihood activities or education). More detailed information would enable NGOs and local governments to understand better who is most affected by the current problems and where the support of external interveners might be most useful.

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