Local Institutions Involved in Management of Community Boreholes in Chiredzi Rural District, Zimbabwe

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Abstract

This paper looks at the involvement of local institutions in management of community boreholes in Sengwe Communal Lands. Qualitative research approaches were used to collect data. Key informant interviews, Focus Group Discussions and Participant Observation were used. Thermal analysis was used to analyze data. Preliminary findings indicate that institutions were not very active and effective in developing, monitoring and enforcing rules for the management of communal water points. Inter linkages of socio- economic and physical drivers have contributed to these outcomes. The study concludes that there is need for policy- makers, planners and water agencies to adequately understand the socio- economic and physical factors in which local institutions are engaged so that they design fair legislations for water resources management.

Key words: Roles, Involved, Institutions, Management, Community boreholes,

1. Introduction and Background

The provision of adequate and safe domestic water in rural communities remains a challenge for most local institutions in Zimbabwe (Mugadza, 1995; Manzungu, 2001). According to NAC, (2000) institutions responsible for the management and maintenance of water resources in Zimbabwe increasingly lack the human, technical, administrative and financial capacity to continue managing infrastructure. Resources from the government and donor agencies needed to deliver centralized water services are in insufficient and this has impacted on their ability to deliver and monitor services (NAC, 2000). The accelerated increase in new water point development and the need to rehabilitate ageing pumps has increased the burden on hand pump maintenance. The continued rise in the Operation and Maintenance (O & M) costs combined with the ever- decreasing O & M budget allocation by the government have made the recurrent budgets inadequate to meet maintenance requirements. Due to budgeting constraints, the Rural Districts Councils (RDCs) took over from the District Development Fund (DDF) and was forced to reduce the number of pump minders. Instead of having one pump minder per ward, the ratio had now declined to one pump minder per five wards in each district (NAC, 2000). Apart from the human, technical, administrative and financial challenges, it appears that most actors involved in water resources management know very little about local institutional arrangements for water resources in communal areas (Manzungu, 2001; Nemarunde & Kozanayi, 2003). The non- involvement of the user communities in the planning and maintenance of water points meant that the water points were regarded as government / DDF property, hence the users were sometimes reluctant to contribute towards the maintenance of the facilities.

There is need for policy- makers, planners and water agencies to pay more attention to the diversity of institutional arrangements that can be used to overcome collective action problems in management of water services (Chikozho, 2001). This article will therefore examine local institutions involved in management of community boreholes in Sengwe Communal Lands, Chiredzi District Zimbabwe.

2. Literature review

Local institutions play a critical role in issues arising from management of open access water points (boreholes) by constructing, repairing and maintaining them (Uphoff, 1986). They comprise a wide variety of formal and informal relationships that enhance or negatively affect societal collective action by making people's interactions and cooperation more predictable and effective (Uphoff, 1986). Narayan (2000) asserts that local institutions have a dual mandate of maintaining social relationships at the community level, as well as interacting with development and social assistance organizations. Institutions often have both formal and informal dimensions, with some part of their operation governed by explicit rules, roles, procedures, and precedents, while unwritten rules, roles, and procedures also shape behavior (Narayan, 2000). An understanding of local institutions is important in any water project attempting to help rural communities, because they (institutions) affect people's opportunities by establishing and maintaining their access to social, material, and water resources. Uphoff (1986) suggests that institutions reinforce capacities for collective action and self- help, while their absence can contribute to immobilization and inertia.

3. Conceptual framework

We build our conceptual framework on key elements of the Design Principles (North, 1990) and the Socio-Ecological Systems (Ostrom, 2007; 2009). In this case our paper only analyses data focusing on roles of local institutions in the Management of Open Access Water Points (Boreholes) in Sengwe Communal Lands. Literature also tells us that setting up of powerful and effective institution is only possible through well constituted organizational structures (Toulmin & Quan, 2002). Given the challenges of collective management of open access of community boreholes in Zimbabwe, the researchers are premised on the assumption that socio-economic and physical contexts facilitate the emergence of effective and legitimate institutions. Collective action is the willingness or ability of people to invest their time, resources and energy towards maintenance or management of a common good. In this paper collective action was categorized as either low or moderate or high (Ostrom, 2007).

4. Material and methods

4.1 Study area

Sengwe Communal Lands are located in Chiredzi District in Zimbabwe's South East Lowveld. It is about 120 km south-east of Chiredzi Town, on the east bank of the River Bubi. Three ethnical groups that are dominant across the study area are Shangaan Ndebele and Karanga's (Zim-Stats, 2012). The study area is located in agro-ecological Natural Region V, characterized by low rainfall of 500mm per year and very high diurnal temperatures of 32 degrees (Mutizwa- Mangiza, 1990). Dry- land and irrigation based crop production and livestock rearing (mostly cattle and goats) are the major agricultural activities and potential sources of income. Due to its proximity to South Africa and Mozambique, cross boarder migration and trading is high across the three administrative wards under study (Scoones & Wolme, 2003**)**. Wildlife- based livelihoods are generated through the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) organized around hunting areas has also assisted locals to repair and maintain water sources (Scoones & Wolmer, 2003).

5. Methodology, methods, and data analysis

Qualitative data collection methods were utilized in this study. Key Informant Interviews were carried out with senior technical and administrative officials from the Rural District Council (RDC), District Development Fund (DDF). At the community level key informant interviews were conducted with ward councilors, village heads, borehole management committee members, and ordinary villagers. Focus Group Discussions (FDGs) were conducted with villagers who are the main users of the borehole. Thematic analysis was used for data analysis.

6. Results

6.1 Institutions that are involved in borehole management

Interviews conducted in the study indicate that they are there are eight institutions involved in developing and maintaining rules for management of boreholes across the study area. These institutions have distinct and overlapping roles which are sometimes conflicting for effective management of boreholes. From FGDs across the study area the Borehole Water Management Committees (BWMC) become prominent for its tangible roles in borehole management. BWMC which is largely made up of women establishes rules and regulation that guarantees cleanness of boreholes area and imposition of sanction to those who fail to adhere to the regulations. In-depth interview with the secretary of Chasumba borehole water management committee in Chasumba village attributed the good state of the boreholes in her villages to the dedication of well-motivated institutions and users who always make sure that they contribute towards repairing and maintenance of boreholes across the study area. In addition the BWMC protects their water points against rule violations by both community members and outsiders by appointing borehole caretakers. Most of the caretakers who resided near the borehole sites were able to observe what was happening from and are empowered to bar anyone who is regarded as an illegitimate user of the borehole. In addition the caretakers also checked the boreholes regularly, and very often applied grease and tightened nuts on them. The case of Charity Sibanda, a chairperson of Hlomela borehole in Hlomela village said that the community boreholes in her villages were operated along strict lines and rule breakers were easy to deal with as they was constitution which clearly spelt out disciplinary measures under different circumstances. The following were some of the important rules that applied to the water points: 1) users were not allowed to fetch water in 200 liter drums, 2) laundry was to be done at designated points within the vicinity of boreholes, 3) children were not allowed to fetch water without adult supervision or play near the borehole, and 4) the pump handle was no to be banged on the ground

The rural District Council (RDC) drills boreholes in the villages, trains borehole management committee members on borehole repairing and maintenance. The RDC is supposed to repair non-functioning boreholes but to date they have not done so for boreholes that have broken down for almost five years. Ward Councilors are also involved in the drafting and establishment of rules and regulations on borehole management. It is also the role of ward councilors to report non – functioning boreholes to the RDC and mediate in conflicts that arose in the management of boreholes. NGOs partner with RDC in siting and drilling boreholes, they also play an important role of implementing government integrated water and sanitation programs. In addition, they train borehole committee members on how to repair boreholes and in most cases NGOs are actively involved in maintenance of boreholes across the study sites. Village heads are regarded as the custodians of the boreholes, they are members in all committees involved in borehole management, they report non-functioning boreholes to the ward councilors Schools, Churches and AGRITEX play minimal roles in the management of boreholes across the study area.

In some villages, indigenous groups have established community organizations local institutions as a solution for confronting economic, social, and political challenges. In some of the villages which were sampled, it was observed that indigenous groups had established some associations, namely, the men's association, women's association and young men's association..

6.2 Institutional challenges in borehole management

Key informant with members involved in borehole management across the study area highlighted a number of challenges that hinder sustainable management of boreholes. BWMC member in Chishinya village indicated that it is difficult for villagers to come up with a single constitution in villages were a single boreholes is used by users from more than one village. This was the case with local institutions and users of the borehole in Govori Village who felt that since the borehole was located in their village they had rights and duties to develop rules for the management of the borehole. According to them, they were entitled to exclude water users from other wards and villages. They also argued that water users from other wards and villages were privileged since they had access to other traditional water sources which they regard as common property. In addition, users from other villages claimed their access rights because they had contributed their labour during the construction of the borehole. These management conflict were experienced in villages such as Govori, Chianadale and Chishinya, the boreholes were used by water users from many villages. A caretaker of Chianadale borehole in Chianadale village pointed out that the size of the user groups of the borehole were too large, for example, 180 households, and this was causing problems in the distribution of responsibilities for input activities for the management of the water point.

He narrated that some neighboring villagers had refused to participate in various activities requiring their input such as cleaning borehole sites and contributing money for repairs, citing long distance they walk to fetch water. It was observed that the rules were not strictly observed. Rules concerning where laundry was done and the amount of water which users were allowed to fetch at any one time were commonly broken. It was common to see women from adjoining villages doing laundry in places very close to the boreholes. Dirty water from washing of clothes formed filthy puddles around the borehole and nothing was done to deter the offenders. Conveniently offenders claimed not to be aware of the rule prohibiting doing laundry within close proximity to the boreholes. These conflicts render BWMC powerless as they cannot take any further action against the offenders. Further, such conflict hinder collective action in repairing boreholes and have been blamed for high numbers of disfunctioning boreholes in the wards which were abandoned after users failed to agree on who is supposed to pay for the repairs of the boreholes.

Key interview carried out with personal from RDC highlighted a number of challenges that affects maximum management of boreholes across the study area. Lack of funds was cited as the major hindrance to timely repairs and maintenance of broken down boreholes. The RDC pointed that continued rise in the operation and maintenance costs combined with the ever- decreasing operation and management budget allocation from the government have made the recurrent budgets inadequate to meet maintenance requirements. Due to budgeting constraints, the RDC was forced to reduce the number of pump minders to one pump minder per five wards instead of one pump minder per ward. Interviewed ward councilors indicated that lack of money across all institutions involved in the management of boreholes was affecting the maintenance of non-functioning boreholes

6.3 Community Perceptions on roles played by institutions

Survey findings indicate that there are multiple institutions involved in the management of boreholes across the study area. NGOs, Borehole Water Management Committees (BWMC), Water Point Caretakers (WPC), and Village Heads (VH), Churches, schools and AGRITEX are the major institutions that are involved in borehole management across the study area. Local users perception on the level of involvement of these institutions in borehole management were discussed using a rank and score strategy during Focus Group Discussions. BWMCs activities were ranked high at a score of 4 out 5; NGOs were the second important actors in management of boreholes with a score of 3 out of 5. Village heads were ranked third at a score of 2 out of 5, the ward councilors involvement was ranked fourth at a score of 1 out of 5. According to FGDs participants, schools and local church's did nothing in the management of boreholes across the study area. The villagers however, pointed out that the least involved institutions (village heads, schools and churches) pretend as if they are playing significant roles in borehole management wherever new programs are introduced at the expense real active institutions. From focus group discussion it emerged that villages have a negative perception towards the RDC which fail to consult them concerning the central area to locate boreholes.

7. Discussions

The study has shown a disturbing but not yet hopeless situation regarding local institution responsible for the management and maintenance of boreholes in the study area. Water services in some rural areas of Zimbabwe. Evidence so far from study indicates that local institutions responsible for water services lack the human, financial and administrative capacity to effectively manage community boreholes. In addition players (institutions) involved in maintenance of boreholes are disjointed in their approaches to water point maintenance and management thus supporting lop holes for non-complaint users to continue using the boreholes without contributing. It is from these outcomes that this study recommends for proper institutionalization, clear and coherent government commitment to community based management of water services.

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