# Institutional Mapping, Water Sources and the Politics of Access in Ward 17, Gwanda – Mzingwane Catchment

### By Pinimidzai Sithole<sup>1</sup>

#### **Abstract**

Historically, local institutions have been based on rules and norms that derived from hereditary chiefdoms and their governing of natural resources. These institutional structures and the values that underlie their establishment are currently persisting, albeit at times in modified forms, alongside of government sponsored regional and local governance structures, and donor-sponsored local organizations that are connected with various non-governmental organizations (NGO)-based development initiatives. This has resulted in a multi-layered structure of institutions and organizations, at times with unclear boundaries and overlapping mandates, which has come to represent a major challenge and opportunity to rural households' access to and use of natural resources. This paper provides some highlights and inferences on how smallholder dry land farmers in the semi-arid tropics of Ward 17, Gwanda - Mzingwane Catchment, Zimbabwe, respond and adapt to the challenges, opportunities and realities of 'water poverty', and the growing need for integrated water resources management. The paper draws some inferences from the socio-economic survey<sup>2</sup>, the institutional and water (re)sources mapping exercise that was conducted in Ward 17, Gwanda in 2006. Transact walks were conducted to map water resources by walking through the whole ward identifying the quality and quantity of water (re) sources. Social maps were used to locate key social features and diagrammatic representation of key institutional interactions identifying and mapping access to social networks, services and infrastructure, and to relations between different social groups. Results from the study show that household decisions regarding the use of particular water sources for multiple uses largely depends on ownership and investment in water, the design of the water collection-point, and the rules/norms of access prescribed by the investor, funder and or founder of a particular water source. Results from the study also show that there is a very high density of institutions operating in Ward 17. Water access and use is governed by multiple institutions ranging from traditional leadership, project/donor laws and conditions, group/community norms/rules to conditions and norms laid out by the founder, funder and or champion of a particular water source. The conclusions drawn from the study indicate that water access and use rights for the majority of users in Ward 17 depend on water sources, and that, the history and nature of institutions governing such access and 'user-ship' is primarily based on ownership and investment (cash and labour) in infrastructure for pumping and maintaining the water (re) sources.

**Key Words:** water sources, political power, use and access; institutional density; forum-shopping; and institutions

<sup>&</sup>lt;sup>1</sup> PhD Fellow: International Water Management Institute. E-mail: <u>p.sithole@cgiar.org</u> or <u>spinimidzai@yahoo.com</u>

<sup>&</sup>lt;sup>2</sup> The researcher was part of the Centre for Applied Social Sciences (CASS) team that conducted a socio-economic survey in Gwanda.

#### 1. Introduction

Water access, use and management, and governance in Ward 17 are a construct of institutional arrangements at play. Historically, local institutions have been based on rules and norms that derived from hereditary chiefdoms and their governing of natural resources. These institutional structures and the values that underlie their establishment are currently persisting, albeit at times in modified forms, alongside of government sponsored regional and local governance structures, and donor-sponsored local organizations that are connected with various non-governmental organizations (NGO)based development initiatives. This has resulted in a multi-layered structure of institutions and organizations, at times with unclear boundaries and overlapping mandates, which has come to represent a major challenge and opportunity to rural households' access to and use of natural resources. This paper provides some highlights and inferences on how smallholder dry land farmers in the semi-arid tropics of Ward 17, Gwanda - Mzingwane Catchment, Zimbabwe, respond and adapt to the challenges, opportunities and realities of 'water poverty', and the growing need for integrated water resources management. The paper draws some inferences from the socio-economic survey<sup>3</sup>, the institutional and water (re)sources mapping exercise that was conducted in Ward 17, Gwanda in 2006. Household decisions regarding the use of particular water sources for multiple uses largely depends on ownership and investment in water, the design of the water collection-point, and the rules/norms of access prescribed by the investor, funder and or founder of a particular water source. There is a very high density of institutions operating in Ward 17. Water access and use is governed by multiple institutions ranging from traditional leadership, project/donor laws and conditions, group/community norms/rules to conditions and norms laid out by the founder, funder and or champion of a particular water source. The paper is organised into four sections. The first section highlights, characterizes and typologise the water sources identified in Ward 17 while the following section provides a brief description of the water uses. The third section covers the institutional issues ranging from governance to forum-shopping while the last section provides some conclusions.

## 2.0. Water Resource Mapping

## 2.1. Identifying Water Sources

I conducted transact walks in order to map and mark the different water sources in Ward 17<sup>4</sup>, Gwanda district. The exercise involved four people: Mr. Thomas Dube a local farmer; Mrs. Thenjiwe Sibanda local farmer; and the researcher and the research assistant. A total of 15 people were involved in the mapping exercise where some

\_

<sup>&</sup>lt;sup>3</sup> The researcher was part of the Centre for Applied Social Sciences (CASS) team that conducted a socio-economic survey in Gwanda.

<sup>&</sup>lt;sup>4</sup> Although the mapping exercise was done in the whole Ward 17, the researcher did in-depth studies in four villages, and did follow-ups in a fifth village. For purposes of clarity, the term Ward 17 is used hereafter to refer to the villages where more intensive research was done: Fumukwe, Humbani, Masiyami, and Mnyabezi. Reference is made also to Magaya village where substantial work was also done, though not in as much detail.

farmers joined the team for a while and would opt out when they could not hang on any longer or to do other duties.

During the mapping exercise, we managed to identify a total of 36 boreholes in the whole ward. The 36 identified boreholes included ones that are operational and others that are dysfunctional. There were only eighteen boreholes in the Ward that were operational during the time of mapping. Of the eighteen operational boreholes, eleven were found in Fumukwe village, two were identified in Masiyami village, two in Humbani village, one in Magaya village, two in Mnyabezi village. There were a total of four small dams/reservoirs with earthen high walls. Two of the dams were identified in Fumukwe village, one in Masiyami and the other one in Humbani village. Along the streams and rivulets dotted around the ward, we managed to identify a total of 23 shallow wells and five protected wells in the ward. The team also identified 17 streams in the ward locally referred to as rivers. Rain was never mentioned as a water source by the villagers although the whole ward relies on rainfall for their crops and livestock.

In order to understand the history, institutional issues, access and use of the different water sources identified, it is imperative to unpack the water sources into different clusters as they are locally understood and portrayed. Water sources in Ward 17 are classified according to the type of access, ownership and investment contributions. The clusters presented below indicate the types of water sources as understood by the villagers as private, communal and donor funded water sources.

## 2.2. Typologising and Typifying Water Sources: Private, Community and donor funded/regulated water sources

Boreholes are the main source of water for villagers in ward 17. It is prudent to understand, quantify and explore the various meanings and explanations associated with water sources in order to come up with a typology. Villagers seem to have devised a special categorization which they use to identify the water sources in their area as follows:

#### Privately owned boreholes

There are nine private boreholes in the Ward 17. The boreholes are classified as private in recognition of the effort by individual villagers who invested their resources in financing the erection and maintenance of boreholes either at or near their homesteads, or within their small family gardens. They are also classified as private boreholes due to the 'rules of access or use restrictions and sanctions' associated with each source. But who are the owners or investors of such water sources? The list and or brief profile of the private boreholes and or their owners is presented in the ensuing paragraphs.

Mr. Bheki Ncube is a relatively successful villager who owns a borehole near the family garden. Other villagers can fetch water for drinking<sup>6</sup> from his borehole, but are not

<sup>5</sup> This aspect of the classification will be elaborated in detail under governance and access issues. The restrictions and or sanctions used to restrict and or allow access act as a major determinant of how each source is categorized and defined.

<sup>&</sup>lt;sup>6</sup> Access to water for drinking is hardly denied anyone in Ward 17. However, there are graduated sanctions governing how often other villagers can access water from a private borehole. This entails restrictions on

permitted to use the water for irrigating their gardens. However, when and if he wants to water his garden, access to the borehole is restricted to his household only. Mr. Nkosi Ncube – a local businessman who owns two boreholes, one at the homestead and the other within the household garden. Is well known as a tough businessman as a result no one else has access to or use his garden borehole. Not even water for drinking. Mr. X works for World Vision an international non-governmental organization. Mr. X has a borehole within his garden, about 150 metres from his homestead. The borehole is used for watering crops in the garden and is not accessible to anyone else in the village because it is tightly fenced and the gate always locked.

Mr. Sibangani Ncube a successful farmer and livestock owner has one borehole in his garden. The borehole was erected in 1985 and is 19 metres deep. Mr. Ncube allows other villagers to access water from his borehole as long as they (other villagers) fetch water for drinking only. He does not allow other villagers to access water for other uses from his borehole. Mr. Z also owns a borehole within his family garden and only allows relatives and close neighbours to access water from the borehole only for drinking. The same applies to Mr. Y who owns a borehole and only allows other villagers access for drinking water only. Mr. Moyo has a borehole at his homestead where access for drinking water is restricted to close relatives and kin only. Only his family uses water from the borehole for watering a backyard garden and livestock.

Mrs. S. Moyo<sup>7</sup> has a borehole within her homestead. The borehole is primarily used to irrigate a flourishing vegetable plot within the homestead, and for making bricks for sale. Other villagers, especially and particularly neighbours, are allowed to access water from the borehole for drinking during times of relative water abundance. An estimated total of 18 households have access to her borehole during the period January to September. However, there are restrictions during dry months i.e. October to December. During the dry months (October – December) only four households are allowed access to the borehole. The four households are close neighbours and have good social relations with the owner.

#### Community/communal boreholes

There are four communal boreholes in the villages. Two boreholes were government funded and handed over to communities<sup>8</sup>, whilst the other two were joint efforts between government, communities and NGOs working in the area. Access to these boreholes is

the amount of water one is allowed to draw per visit, the number of times one is allowed to visit the borehole per day, and whether or not a wheel-barrows or scotch-carts are allowed.

<sup>&</sup>lt;sup>7</sup> The borehole was purchased by her husband, a liberation war veteran who works at a youth training centre. Regardless of the many stories doing the round in the village about how the family uses political muscle to lay its hands on government resources, she still remains the only de facto female owner of a borehole in the village.

<sup>&</sup>lt;sup>8</sup> The mandate to oversee the use and maintenance of government funded boreholes used to be the responsibility of the District Development Fund (DDF). That responsibility was transferred to local authorities, Rural District Councils (RDCs). In this case, the responsibility and authority for such boreholes lie with the Gwanda RDC. The villagers/communities only have care-taker roles for use, operation and maintenance, with ownership vested in the RDC.

not restricted and all villagers have equal access (in theory)<sup>9</sup>. The distance of one's homestead from a particular borehole serves as a self-limiting measure in terms of access i.e. the further away a particular borehole from a household, the less likely that the particular household will access water from such a source. However, there are a few special cases where some household members endure the relatively longer distances i.e. ranging from 1.5 to 2 km because the water from the borehole closest to their homestead is deemed of poor quality (high salinity levels).

#### Donor-funded and/or regulated boreholes

There are five exclusively donor funded and regulated boreholes in the villages. In principle the boreholes are open access to all the villagers. In practice though, there are limitations to access for certain uses. For example, two of the boreholes were meant only for drinking water for households. There were specific instructions laid down by the funding organizations that the boreholes were never meant for livestock watering. Although the villagers accepted and agreed to the laid down regulations at inception, there has been a tendency by villagers to breach the agreement and water their livestock instead. The two boreholes had their fencing equipment vandalized. The villagers then made a make-shift trough for watering livestock around the casing of the borehole. (See pictures below).



The pictures above show the levels of vandalism of fencing equipment on EU-ECHO funded boreholes in Fumukwe village. Far left and centre pictures depict a make-shift livestock drinking trough made by villagers despite assurances made to the donor that the borehole was to be used for drinking water only.

#### Protected wells

There were five protected wells in villages of Ward 17 where the research was done. The first well belongs to members of the Zion religious sect. The well is lined with brick and cement walls. Access to the well is restricted to the households and or members of the sect only. The second well belongs to Mr. Sibangani Ncube who also has a borehole in his garden. Access norms and restrictions to his protected well are the same as for his borehole where other villagers are only allowed to fetch water for drinking only. The third unprotected well belongs to Mr. Zikhali. The well is situated inside his garden on

-

<sup>&</sup>lt;sup>9</sup> See governance section for an example of how a communal open-access borehole was slowly transformed into a restricted, 'selective' and/or 'group' access for only those individuals and households that participated in the rehabilitation of the borehole.

the edge of a local stream. Access to the well is only by his family. The remaining two wells belong to Mr. Moyo and Mr. Dude where access is restricted to their families and kin only.

#### Unprotected (un-lined) Shallow wells

Of the 23 shallow wells identified during the mapping exercise, I will focus on the 8 shallow wells which yielded water for more than four months per season, including the dry months of October and November. The shallow wells are dug out using hoes and shovels, and sometimes with bare hands. The unprotected shallow wells are normally dug right on the river/stream bed or at the foot of a dam wall. The wells are usually fenced and/or covered with thorny branches to protect them from livestock. Water from the wells is used for drinking, watering gardens and for brickmaking. There was only one household that had a perennial shallow well within the household garden (see Mr. Thomas Dube's profile). The wells accumulate water or fill up over night where upon villagers wake up early in the morning to fetch the water and irrigate their gardens. Alternatively, the villagers fetch water from the shallow wells early in the morning to fill-up containers at their homestead for brick-making.



Examples of shallow wells (in Fumukwe village) covered with tree branches (left) and thorns (right). Water from the two wells is mainly used for brick-making.

#### Small dams/reservoirs

There are three small dams or reservoirs in Ward 17. One of the reservoirs is on Fumukwe stream, near the local shopping centre. The dam was built in the 1960s mainly for livestock watering. The dam/reservoir is an open access resource where all villagers can have access for livestock watering. Although there are no clear guidelines, there seem to be a general norm or understanding that no one is allowed to use water from the dam for watering their gardens despite the fact that there is a cluster of family gardens at the foot of the dam wall. Villagers use a nearby borehole for irrigating their gardens.



#### 3.0. Water Uses in Ward 17

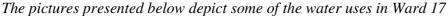
People in Ward 17 access water for multiple uses ranging from laundry, bathing, drinking, washing, livestock watering, brick-making, watering gardens to beer-brewing and dipping cattle. Of the uses outlined above, there are three main types of water uses that cut across all the villages in ward 17. These include gardening, livestock watering The three main uses stick-out from the rest because of the and domestic uses. contribution they make to both household welfare and household livelihoods in the villages. Water use for gardening was primarily chosen because of the central role of garden produce in providing nutrition for the households involved and also for income to cover day-to-day needs. I also selected water use for gardening as a result of the wide use and application of drip-irrigation in Ward 17. The other reason that makes water use for irrigating gardens stand-out is the role of women in managing water for production at the garden level. Most garden work such as watering/irrigating, cultivating and weeding is done by women while men chip in by contributing in maintaining garden fences. This does not mean there are no men who actively participate in day-to-day gardening activities. A good example of men who work in the family gardens while their wives do other chores at home is Mr. Thomas Dude<sup>10</sup>.

Being a predominantly livestock producing area, water for livestock is very important especially during the dry season when households without boreholes of their own resort to fetching water from communal boreholes early in the morning before the yield get low to water their livestock later in the day. This is also one of the reasons why those with

<sup>&</sup>lt;sup>10</sup> See Case 1 insert box for more details.

privately owned boreholes do not allow other villagers to have access to their boreholes for purposes beyond drinking for household members.

The prevailing perception amongst some villagers is that restricted access for other uses such as gardening and livestock watering is a way of reducing competition for produce on the market. Most resource poor villagers strongly felt that their counterparts with privately owned boreholes put in measures to restrict access and use of their facilities because they (the borehole owners) can not compete with poor households in terms of vegetable production, hence the restrictions are meant to stifle competition for produce on the market. So the regulations/restrictions serve to even out the playing field by denying those with labour access to privately owned boreholes. I asked several farmers whether it was not possible to exchange labour for access to water for their gardens. The response was that those who own boreholes do not want to sell water, neither do they want to exchange labour for water access by resource poor villagers. It is therefore difficult to easily strike a win-win compromise, and provides incentives for the researcher to follow-up on the leads.





#### Case 1: Mr. Thomas Dube's Household: Gardening for livelihood

Mr. Dube is a 64 year old farmer who has a small garden on the bed of Fumukwe stream. He used to work in Harare for a music recording company before retiring ten years ago. His garden is the main source of income and livelihood for his household. He grows tomatoes, rape, cabbage, carrots, onions, green beans and peas. The main and only source of water for his garden is an unprotected/un-lined shallow well situated within the garden. He has water all-year-round for gardening. He chose and allocated himself the land upon which his garden is situated. He did not have to consult with any authority since that part of the village land is deemed common property.

Mr. Dube does most of the work in the garden with the assistance of his wife. Mr. Dube works in the garden everyday and does the watering, weeding, and fencing of the garden. Mrs. Dube helps out with watering, harvesting and marketing of the produce throughout the village (s). The Dubes, just like most other households, have access to drip-kits which they obtained from local and international NGOs working in the area.

Mr. Dube is an active member of the local farmerfield group (Tovimba) where he teaches other farmers good farming practices such as contour ridging and ripping.



The pictures show sections of the garden including the drip-kits, the shallow well and the produce. Some of the challenges the Dubes are facing with their gardening initiative include: pest control, preservation, and storage of produce.

## 4.0. Institutional Mapping, Institutional Density, Forumshopping and Governance

### 4.1. Institutional mapping and Institutional density

Any serious discussion of institutions cannot afford to ignore two other related terms, namely organisations and governance. Shah (2007: 66) suggests that if institutions as formal rules, informal constraints (norms and behaviour, conventions, and self-imposed codes of conduct) and the enforcement characteristics of both are rules of the game, organisations are the players. Organisations refer to groups of people with shared goals and some formalised pattern of interaction, often defined in terms of roles such as water user association, farmer unions and regulatory bodies (CAWMA, 2007). Governance, on the other hand, is the way authority is organised and executed in society and often includes the normative notion of the necessity of good governance and includes institutions, organisations and policies ((ibid).

There is a high density of institutions and organisations (primarily donor-funded, and government agencies) in Ward 17 with multifaceted roles ranging from provision of water services, regulating access, infrastructure development and maintenance. Some of the most active and visible institutions involved in water resources management, access and use include:

- ITDG/Practical Action
- ICRISAT (Hlanganani, Tovimba, Qinisile)
- DE German
- World Vision
- European Union-ECHO
- Local Government (Gwanda Rural District Council)
- Traditional leadership (headman/women, and chiefs)
- Water committees, and
- District Development Fund (DDF)

These institutions do not operate on their own and have to liaise, negotiate and cooperate with the local villagers in water resource issues. The institutions I have presented above are the ones with visible presents in the villages, yet there are more subtle powerful institutional players who only become very public when there is an issue to be addressed. The group pits councilors, extension officers, traditional leaders and liberation war veterans. <sup>11</sup>

## 4.2. Governance and Forum-shopping: Rules, Regulations and Guidelines for access and use

By water governance, I refer to the local level arrangements and understanding used to determine resource access and use. Water governance in Mzingwane is based and revolves around six broad issues/clusters: the founder associated with the resource, the funder or agency which financed the water resource point, and the amount and/or quality

<sup>&</sup>lt;sup>11</sup> See the institutional clusters under governance and forum-shopping.

of investment involved at the local (user level), and the role of traditional leaders, war veterans and extension agents. The existence of such a high density of institutions in the villages of Ward 17 has provided opportunities (and challenges) for the villagers to have a wider-spectrum to choose from, this is what I refer to as forum-shopping.

Forum shopping is clearly demonstrated in the villages in three forms. The first is where the villagers, when presented with an opportunity for infrastructure development such as boreholes by the donors and/or government, they accept the conditions, regulations and guidelines brought by the investor unreservedly. A good example is borehole 'A' in Fumukwe village which was funded by EU-ECHO on the basis that water from that borehole was meant only for domestic uses. Given the prevailing 'water poverty' in the village, villagers accepted the offer from EU-ECHO and undertook to abide by the regulations stipulated. A borehole committee was formed, with a membership of 12 people (six women and six men). A month after the borehole was erected; there was a mushrooming of small gardens near the borehole. A meeting was called by the borehole committee to try and chastise the six people who started gardening near the borehole. It emerged at the meeting that the six had asked the local headman for permission to put up small gardens near the borehole and it was granted. The villagers resolved that if many people were to put up small gardens near the borehole, it will dry-up the borehole. The committee, the headman, the councilor and the villagers agreed that instead of gardening, it was better for the community good to build a trough for livestock watering instead. In the end they resolved to build a rudimentary trough around the borehole casing. See picture below

The trough was built without consulting EU-

ECHO and in breach of the undertaking that the community and the leaders pledged at the inception of the project. I enquired with the borehole committee, the headman and the villagers, how and why they decided to breach the agreement. First to respond was the headman (Mr. Sibanda) who explained that providing the villagers with drinking water only when they do not have relish (vegetables) to go with their meals and when their livestock did not have water to drink was not only wrong, but also unacceptable. I quizzed him to explain why they agreed to the proposition by EU-ECHO? Mr. Sibanda explained that it was not wise for the villagers to turn down an opportunity to have a borehole, the first step was to secure the borehole, and what to do with the water was for the villagers to decide, and not EU-ECHO. Regardless of the earlier undertaking they had with EU-ECHO, the people of Fumukwe proceeded to build a trough where their livestock drink water. Members of the borehole committee concurred with the headman's sentiments that the decision on whether or not to fund the borehole rested with EU-ECHO, as such the villagers had to accept whatever terms and conditions that were

attached to the funding of the borehole. However, what to do with the borehole and how to access it was the prerogative of people who live in the village and their leaders. The lesson here is that villagers negotiate access, and are willing to play-along as long as they are guaranteed infrastructure and access to water.

The second aspect of forum-shopping is where and when villagers take over the responsibility to rehabilitate a broken down or dysfunctional borehole, and claim ownership. The norm is to request all villagers to contribute in cash or labour to the rehabilitation process. When only a few villagers responded and contributed to the call for contributions to rehabilitate a DDF funded borehole, they claim exclusionary 'usership' rights where access is only by those who made contributions. This has been widely backed and accepted by the traditional leaders and the councilors. Other villagers, who chose not to participate and hence lost out on access and user-ship, claim that they did not participate in the rehabilitation process because there are other communal water access points in the village. The availability of alternative sources of water is a major contribution for villagers when deciding whether or not to take part in communal resources, they forum-shop and make decisions on where and whether they want to contribute based on perceived incentives. The majority of villagers acknowledged that if the DDF borehole was the only source of water in the village, they would have contributed, but when there are numerous other sources of water available, they do not count their exclusion as a loss.

The third aspect of forum-shopping applied to how villagers selectively pledge their allegiance to the traditional leaders, the borehole committees, and/or the councilors in times of disputes, competing claims over resources and confrontations. What I observed as a developing trend or pattern in Ward 17 is how villagers play-out institutions of authority against each other, rather than direct confrontation between and amongst the villagers themselves. How did this play-out? This is most demonstrated and most played-out between the traditional leaders and elected leaders (such as councilors and borehole committee members). One good example is how the six villagers went and asked the headman to put up gardens near the borehole, with the full knowledge that no such activities were allowed by the borehole committee. The point of contestation and negotiation pitted the borehole committee with the local headman. Yet in another village, the councilors also try to out-fox the traditional leaders by playing convenient and flexible saviors in resolving conflicts, and the villagers are not just recipients but active players and negotiators as well to serve their own ends.

Private water sources are governed by unwritten codes and norms across the ward. For example, Mrs. Sibanda allows other villagers to fetch water from her borehole provided they abide by the set conditions of access. From January to September, all the villagers are allowed to fetch water in quantities of up to 20 litres per trip per person, and not allowed more than two trips per day. During the dry period/season (from October to December) other villagers (apart from the four designated households) are not allowed to fetch drinking water in buckets and containers of quantities above 1 litre. She does not deny other people water for drinking provided it is in small quantities as prescribed above. To ensure compliance, the design of the borehole makes it difficult for one to

access it without notifying the owner or members of the household. No one has ever breached or broken the unwritten code or regulations as stipulated by the owner. Mr. X who works for World Vision avoided sharing his borehole water by ensuring that the garden is tightly fenced and the gate to the garden locked all the time, all this to ensure no one else, except his family and kin access water from the borehole.

By access, this is attributed to whether the water source in question is open to communal access where everyone is allowed to use the source, private access where jurisdiction to use is determined by the owner or individual, 'project access' where only members of a particular project can access the water source, and or 'selective' group access where only individuals and households who participate in the maintenance and repair of the water source are allowed access. I will present a brief synopsis <sup>12</sup> of each of the cluster (s) of players who hold clout in terms of regulating water access and use in Ward 17.

- The first cluster, common with most donor funded water infrastructure in Mzingwane catchment are water user committees which tend to operate under a mix of the prescriptive conditions, set of guidelines, rules and regulations negotiated with the community (by the donor) during the process of developing and proposing the funding arrangements for the infrastructure (borehole, community garden, dam etc).
- The second cluster is that of individuals and households that invested in boreholes and shallow wells at their own expense, hence, they define, dictate and determine the access and use of their water<sup>13</sup>.
- The third cluster is that of local government and/or government department funded infrastructure. In Mzingwane, like elsewhere in Zimbabwe, this mandate was the prime responsibility of the District Development Fund (DDF)<sup>14</sup>.
- The fourth cluster is the role of traditional leaders, who by virtue of the centrality of their roles as local leaders, are vested with decision-making, adjudicating and negotiating authority on and behalf of the villagers qualify to be a governing institution in their own right.
- The fifth cluster is that of governance structures and authority emanating from purely politico-administrative power bases where elected representatives from political parties hold sway as rivalry institutions to the traditional leaders.
- The final and sixth cluster is that of agricultural extension agencies. For the villagers, the extension agent representative in their area holds a huge position

<sup>&</sup>lt;sup>12</sup> This section is part of the on-going write-up on institutional analysis, politics of access and governance as a draft thesis chapter for my PhD

<sup>&</sup>lt;sup>13</sup> This I refer to as private ownership where decision making in terms of access, use, management and maintenance is at the discretion of the owner/founder.

<sup>&</sup>lt;sup>14</sup> The responsibility for water infrastructure development and maintenance has since been shifted to the rural district councils (RDCs).

and acts as both a repository of knowledge and as an intermediary between and among the clusters and villagers.

#### 5. Conclusions

In studying institutions in water access, use and governance it is important to focus on social practice, which refers to the visible undertakings of people, what they do in a structured and structuring fashion, and can be studied empirically rather than focus on top-down formalised policies and laws of the book. As such, both the institutional environment and the institutional arrangement should be analysed so that the two are closely matched. The reality of the institutional arrangements or state of play can be used to restructure the institutional environment if necessary.

The nature of institutions is shaped by the resource itself (water source or access point) as well as the socio-political context within which institutions operate. For example rules governing use of such fugitive resources such as water and wildlife cannot be simply be extrapolated to sedentary such as land and forestry. This is because in the latter it is physically possible to isolate the resources and stake rights over them. But the issues are much more complex than physical boundaries. Institutional arrangements are part and parcel of the society within which they occur, and need to be contextualised within the socio-political, cultural and economic setting. To understand local institutions and how they shape and are shaped by the environment, one need to understand the social practices of the actual users before prescribing changes and crafting new institutions.

However, just as with land, there is often a parallel legal framework governing access, control and use of water, under the jurisdiction of traditional system. This traditional system tends to be more equitable and protective of vulnerable livelihoods (see van Koppen et al, 2007 for a fuller discussion of local water law). Unfortunately in the region there tends to be outright antagonism or a begrudging acceptance of the reality of local water management arrangements. This paper highlighted some of the nuances that characterise the social practices in Ward 17, and how the social practices shape the institutional issues. It also showcases how water users (villagers) are active in negotiating access and help shape the rules of the game to suit their needs and context by pledging selective allegiance to those who wield political clout so that their actions are rewarded.

#### References

CAWMA (Comprehensive Assessment of Water Management in Agriculture). 2007. Water for food, water for life: A Comprehensive Assessment of Water Management in Agriculture. Earthscan. London: and International Water Management Institute: Colombo.

Shah, T. 2007. Issues in reforming informal water economies of low-income countries: examples from India and elsewhere. In: van Koppen, B., M. Giordano and J. Butterworth (eds.) Community-based water law and water resource management reform in developing countries: CAbi Oxfordshire and Cambridge.