GOVERNANCE CONSIDERATIONS

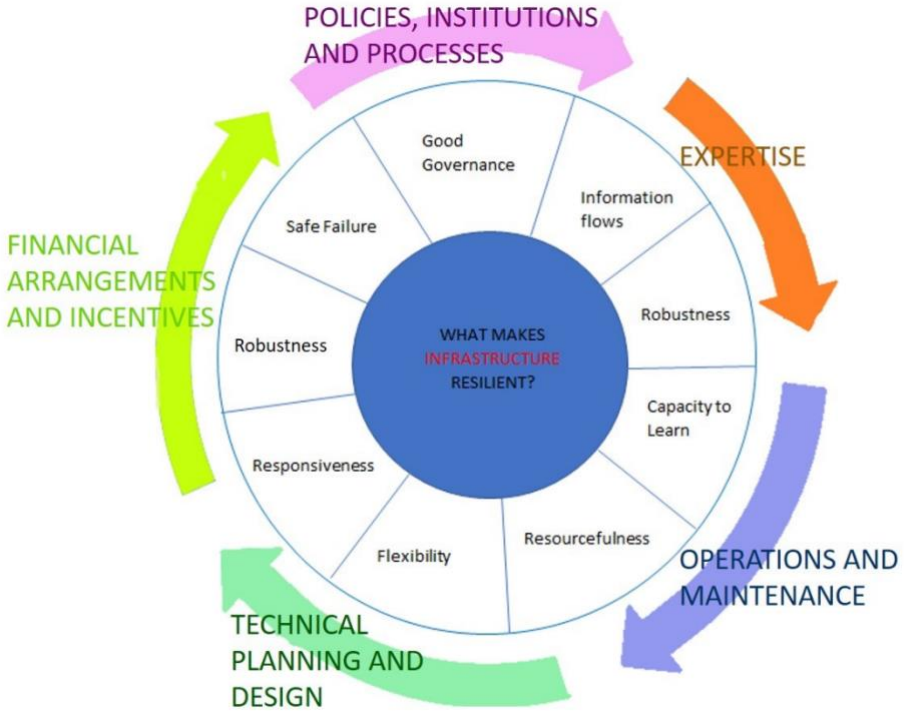
BACKGROUND

Governance relates to how water supply, access, availability and use is managed at individual, local and institutional levels.

The GLSCRP focusses both on technical design as well as local level and institutional options for improved management and maintenance of built infrastructure in a changing climate. Aspects of integrated water resources management at a village and catchment level are also important. In general, demand for water is increasing while the environment's ability to supply water is decreasing- and at a rate much faster than can easily be accommodated. Management of catchments and recharge areas is crucial, but presently not well considered.

To date the process has entailed provision of water access and infrastructure through mandated government institutions, with an expectation of care, management and maintenance by the beneficiaries. How this is meant to happen however, has not received a lot of attention.

Day to day operation and maintenance of water supply schemes is managed through stipended scheme 'operators' and voluntary water committees at local levels, linked to ward councillors to the water service providers and authorities. Some attention has been given to procedures as well as the roles and responsibilities of each of these role players. How these actors relate to each other and to their communities, thus issues of governance and participation, is critical for effective and sustainable implementation.



Above: A diagram outlining Infrastructure resilience properties (Gallego-Lopez & Essex, 2016) (

This document considers guiding principles to provide for more effective local governance and participation.

COMMUNITY LEVEL INVOLVEMENT

All members of a community are expected to make use of provided infrastructure and water access in a responsible manner. For this to be possible all community members need to:

- *be considered in terms of their needs,*
- *be informed about the technical aspects of operation for the system,*
- *understand the implications and limits of access and availability of water,*
- *know and agree to the management and operational confines of the system and*
- *be willing to follow the rules set in place for quality, management and use of water.*

The above can only happen if every single member in the community takes some individual responsibility and considers the impact of their actions on their neighbours and community. In larger and more urban communities, individual behaviour is controlled primarily through payment for specific services and access, with associated regulations. In rural and informal communities, this system of control does not exist. This can lead to high levels of inequity, competition, abuse, and mismanagement of water supply systems.

The temptation is to attempt to enforce payment and regulation of services. The solution however, lies more in the full participation of all community members in every phase of the process.

GUIDELINES FOR COMMUNITY LEVEL ENGAGEMENT

Community members need to be engaged in initial baseline, vulnerability and feasibility assessments for proposed water supply schemes.

Community members need to understand water access options, water sources and availability and water use implications for their village.

Community members need to be provided with information to be able to assess the proposed scenarios for development of water access options.

Community members need to be provided space for learning and analysis of concepts related to water management in their areas, including for example climate change impacts, rainfall and water infiltration, groundwater and groundwater management, water quality for drinking and

multipurpose use, technical aspects of proposed systems, solar energy, water purification options, water use and conservation etc., so that they are better able to make informed decisions.

Community members need to develop an understanding of water provision as a service with the potential for different levels and sources of access for different purposes and different levels of access to this service dependant on financial and other contributions.

In complex programmes scenarios are developed. These are refined in the planning and implementation and yet further changes can occur during the contractual and commissioning phases. Expectations are raised in each phase and community members often remember well what was "promised' at the beginning. This process requires careful explanation on an ongoing basis. NOTE: the tendency is to not provide detail or make specific 'promises' to avoid the resultant conflict, but the better practise is to explain the changes and difficulties as the process unfolds, which despite being a lot more intensive has the advantage of also increasing community level understanding of the issues and problems involved and this level of transparency builds trust and rapport between the role players, as well as a level of accountability in expenditure.

Community members need to engage with and negotiate all parameters of the scheme to be able to take responsibility for further operation, management and maintenance.

Community members need to be involved in decision making on a day-to-day level and in selection/election of local water governance structures/committees.

They need to be a part of the process of decision making around beneficiation and equity.

ASSUMPTIONS:

It is possible to make some assumptions on how individuals in rural communities will behave, based on experiences in engaging these communities in designing, planning and implementing local water access options, rather than being the passive recipients of externally designed and implemented water supply systems. These experiences have shown that:

- *Community members are willing and able to participate.*
- *Community members are willing to volunteer their time, labour, and money towards ensuring a functional water system.*
- *Community members are committed to ensuring that their water supply system is operational and looked after.*
- *Community members are willing and able to make rational and considered decisions around water use and management if provided with appropriate information on which to base such decisions.*
- *The actual level of involvement in the operation and maintenance of the system is a choice for community members. Some members participate by voluntarily following the rules and others are more involved in the management of the system.*
- *Levels of water access need to be equitable and transparent.*

GUIDELINES FOR LOCAL GOVERNANCE STRUCTURES

At community level arrangements are more often than not already in place, although they would be considered informal. Often these arrangements will not fulfil the requirements of the Water Service Authorities but provide for a level of stability and equity within the community.

Water committees are voluntary structures and as such have two major weaknesses:

Members do have a certain level authority within the community but are not able to effectively police any rules. They cannot control or officially/legally enforce any of the rules agreed to be the community. As such informal arrangements are developed. Often it relies on community members

contributing in time and in small regular payments to an agreed activity, such as water infrastructure maintenance or borehole pumping costs for example. The committee keeps records of those community members who pay and those who do not. Generally, those community members who resist the rulings or do not pay are considered not to be part of the process and their opinions or complaints or difficulties are then not taken into account and

Members of committees can take advantage of their authority to improve their own beneficiation, often justified as a form of compensation for their efforts. This process, if managed in a transparent way, could actually assist in providing for longer term sustainability of committees, as it provides some benefit to the committee members who often have to deal with many problems, conflicts and complaints on an ongoing basis.

At village level this is a manageable beneficiation system and can allow for a stable and ongoing operational system, without too much conflict. There is however a chance that vulnerable households and individuals are excluded from a service which should benefit all community members. Households with very high levels of poverty are more often than not also households where members engage in socially high risk and unacceptable behaviours, which ostracises them from the rest of the community. Other prejudices may also surface, especially around unmarried women with children and 'foreigners. It is proposed that this process be externally facilitated, as it is unlikely that communities themselves will design d=systems that are fully equitable.

LOCAL WATER COMMITTEES

Care needs to be taken to ensure that these committees are well represented and should include representation from:

- The traditional ward councils
- The Local ward councils (Local Municipality)
- Local representatives of the Water Service Authority and providers
- Members form local development structures and interest groups, including for example the livestock association, development committees, farmers associations and groups, cooperatives, churches, schools and creches and
- Local household members; both with access to individual water supply options (like boreholes and springs) and without.

These committees need well developed constitutions with roles and responsibilities outlined therein. These committees also need to have arrangements in place for operations and maintenance of the water service in their village as well as security of infrastructure.

Security concerns for infrastructure are a reality and something that water committees invariably will need to deal with. Local security arrangements are important and are already being more commonplace, both for infrastructure and for livestock. In some villages in Giyani, including Mayephu, 24hr patrols have already been put in place to monitor and control theft. It is foreseeable that these patrols can also undertake monitoring of the water infrastructure, within the same broad system. In other villages, households closest to the infrastructure are tasked with 'keeping an eye' and are assisted by the water committees, or guards are appointed and provided with a stipend collected from community contributions.

INSTITUTIONAL ARRANGEMENTS FOR OPERATION AND MAINTENANCE (O&M)

O&M is sometimes thought to be a simple technical matter that is easy to solve. Yet as the persistent breakdowns in water supply systems in many villages illustrate, adequate O&M relies on a surprisingly complex set of organisational functions and competencies. Suitable human resources, access to the right tools, an inventory of spare parts, reliable transport, mechanisms for reporting breakdowns, accountability frameworks, and assured, regular funding are all vital (SADC-GMI, 2020).

O&M includes regular tasks such as replacement of worn parts, refuelling, servicing, cleaning and monitoring, as well as dealing with irregular breakages, outages and malfunctions. Long-term, successful O&M needs suitably skilled and motivated personnel and depends in turn on a set of institutional and organisational systems that are viable financially and politically (SADC-GMI, 2020).

There are many factors that determine the quality of O&M. The main ones are quality of staff, access to dedicated O&M funds, and the quality of records and analysis of information

Technical and operational procedures for ongoing management of the water supply systems are being and should be designed and outlined by the institutional role players in water service provision. The question here is how communities engage in this activity.

It is assumed by both local beneficiaries and waster service providers that communities can undertake day to day tasks in operation and maintenance. Community members are the first to state that they can and already do, undertake simple and low-cost maintenance activities to their water schemes by themselves. These include actions such as replacing leaking taps, fixing leakages in pipes and replacing or adding valves. Communities also willingly manage water distribution aspects, such as switching pumps on and off and opening and closing valves to supply different sections of their villages with water.

They falter however, where faults are more technical in nature, such as when pumps do not function well, or break, or when there are faults in the electrical or fuel supply systems. Replacement of filters and other spare parts are also problematic mostly due to lack of access to these. Good working relationships with the technical and institutional partners are critical for these aspects.

The basic principle as outlined already, is that everyone needs to be engaged even if only at the level of closing running taps or reporting leakages or issues to the water committees and scheme operators, as well as in following prescribed procedures for access. These activities all fall within corrective maintenance actions and are demand driven, rather than being preventative. For the latter, a high level of pro-active planning and collaboration between stakeholders is required.

A NOTE ON COST RECOVERY OPTIONS

Sustainable infrastructure projects must generate a sound revenue stream based on adequate cost recovery and be supported, where necessary, by well - targeted subsidies (to address affordability). Users' willingness to pay for O&M and development of suitable tariffs are central to the ongoing sustainability of a water supply system.

Tariffs usually contain two charges; a charge that depends on the volume of water used and one that is no e.g. connection fees, ad hoc maintenance fees and the like.

From discussions with local water committees in Giyani, members are confident that monthly fees from users is an option. The value of such fees should in their opinion not be higher than R20/ user/ month, given that most households in these villages are extremely poor and unemployment levels are very high. This is clearly not a full cost recovery option but can assist greatly in overall sustainability.

Regular monthly payments by all households in a village is however logistically problematic, especially for larger villages. Generally ongoing financial contributions for groups larger than 20-30 members becomes unwieldy, with high levels of effort spent on policing and the resultant conflicts often lead to failure of the process. Below are some suggestions of how this can be managed:

- Monthly contributions by households are recorded by the water committee and those who do not pay are regarded as non-participants and not supported when they have difficulties in access. This is an existing system in some of the villages and is accepted and manageable but has the distinct drawback of excluding vulnerable households.

- Divide the village into sections with smaller numbers of households and manage monthly contributions and access per section. In this approach, each section can be provided with a target value of monthly, weekly or daily financial contributions to allow for access. The decentralization of this system is a strength, but defaulting can still cause major difficulties. Cross subsidization for the poorer households is however an option.
- Use of local savings mechanisms to allow for regular payments. The large majority of rural households belong to a range of informal savings groups, such as stokvels and funeral groups. Local savings and loan associations are an extension of this practice, which allows for improved cashflow and accumulation of funds for specific uses. The strength of these groups is that they are voluntary and generally well established in rural communities. The drawback is still that vulnerable households are excluded and that these groups require some level of external facilitation and policing to remain well managed in the longer term.

Thus, the main question becomes one of how equitability and the right to water can be ensured for vulnerable households. The logical option is that those households with the ability and resources to secure larger volumes of water for themselves cross-subsidize those who cannot. This approach would entail tariffs set at village level related to the volume of water accessed.

A case study to follow on discussion of such options with local water committees and their responses…

RECOMMENDATIONS FOR WATER SERVICE PROVIDERS AND AUTHORITIES

The full engagement and participation of local communities is also impacted by how the water service stakeholders and institutions interact with them. Below are some broad recommendations for management of these relationships:

1 Local level governance systems need to be respected but also interrogated in terms of acceptable levels of provision for equity in access to water within the community.
2 Engagement of the governance committees and community as a whole in being more equitable in terms of their access arrangements is important.
3 Community engagement needs to be broader than just the committees and operators at all stages of the discussion: Feasibility, design, implementation, operation and maintenance.
4 Committees should be well represented – traditional authorities, local government councillors, active water users in the areas, such as crop and livestock farmers and individuals who can represent more vulnerable groups in the village.
5 Institutional engagement in punitive measures for those who have informal or illegal connections is unlikely to have a positive outcome.
6 Hoarding of water and water provision options, by those households which can afford it and have power within the community should be dissuaded. Here, a user pays arrangement can potentially be negotiated. At the very least, they should not have more access to communal water than everyone else in the community.
7 Payment for water use in excess of an agreed amount, can be used towards setting up a community level fund for maintenance and operations.
8 Ongoing monitoring of water levels, specifically for borehole schemes, with a coherent system of reporting is important. In this respect provision of dip meters will be required. Scheme operators need to have someone to report to who can make decisions regarding use, over-use and remedial actions that can be taken.

References

Gallego-Lopez, C., & Essex, J. (2016). *Deisgning for infrastructure resilience.* UK: Evidence on Demand. DFID.

SADC-GMI. (2020). *Training manual for operation and maintenance of groundwater infrastructure in SADC.* Bloemfontein, South Africa: SADC-GMI report.