

Buvuma Island Group

- 50+ islands in northern Lake Victoria, Uganda (East Africa)
- Estimated population of 70,000-100,000 people in 100+ camps



Buvuma Island group (cont.)

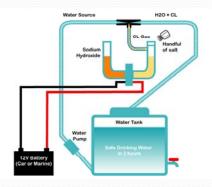
- Subsistence, fishing-based economy
- Like many rural areas in the developing world, no public water, sanitation, or electricity, and very limited access to schools or medical care.
- Additional geographic and social isolation
- For historical and political reasons, Ugandan government provides few services on the islands

Shepherd's Heart International

- Founded by Karina Thomas, a former YWAM worker.
- Holistic approach includes: water and sanitation, basic health care, marriage/family education, evangelism, discipleship, savings/micro lending, secondary school, agricultural/business development.
- Capacity building and empowerment of indigenous leaders.



McQuire Water Purifier



- Designed and manufactured by New Life International of Underwood, Indiana.
- Units employ a chlor-alkali electrolysis process to convert table salt (dissolved in water) to chlorine (Cl₂) gas. The system infuses chlorine gas in the water for purification, and the byproducts are hydrogen (H₂) gas and sodium hydroxide (NaOH).

McQuire Water Purifier (cont.)

- Units require low cost supplies and minimal maintenance, weigh less than 15 pounds, and fit into a Rubbermaid storage bin (easy to check as luggage).
- Designed to work off a 12V DC battery which, in turn, can be solar powered.
- Currently in use at 1,000+ locations in 60+ countries, primarily schools, hospitals, and other NGOs.



Challenges

- In varying degrees, water committees maintain tenuous control of the system, safe water production, and fee collection.
- Some villagers resent and resist paying for water produced by a donated system.
- Water committee members and villagers alike have concern about charging fees for a resource they believe should be available to all without charge, particularly under conditions of extreme poverty.
- As a result, committees generate insufficient revenue to maintain and repair their systems (e.g., battery, solar panel, hand pump).
- Because the unit belongs to the village as a whole, these problems relate to "the tragedy the commons."
- Given these issues, is community management appropriate or feasible?

Community Management Concept

(Harvey & Reed, 2007, p. 365)

The community that benefits from an improved water supply should:

- Have a major role in its development,
- Own the water system or facility, and
- Have overall responsibility for its operation and maintenance (O&M)

Historical Perspectives

(Harvey & Reed, 2007, p. 366)

Reasons for community management emphasis:

- Poor service delivery and performance by government institutions.
- Suitability to the project approaches adopted by nongovernmental organizations (NGOs) and donors.
- Western 'cultural idealization' of communities in low income countries.

Community Participation:

- Expression of demand for water
- Technology and location selection
- Provision of labor and materials
- Contribution to capital costs
- Contribution to O&M costs
- Selection of management system

Community Management:

- Water committee formation
- Training and capacity building
- Setting and collecting water fees
- Management and/or implementation of O&M activities

Limitations of Ownership

(Harvey & Reed, 2007, p. 371)

- There may be no definition of what constitutes the 'community' and it may have no clear or legal identity.
- The location of the facility is unlikely to be equidistant from all users and hence true equity is impossible to achieve.

Limitations of Ownership (cont.)

(Harvey & Reed, 2007, p. 371)

- The ability to pay for the service may vary greatly within the community and the fact that each household should contribute the same amount may be seen as 'unjust' by some.
- Disagreements and distrust between different families or individuals can make the very concept of 'community' difficult to accept.

Limitations of Ownership (cont.)

(Harvey & Reed, 2007, p. 371)

- The facility or system may be installed on land which belongs to an individual or the government, resulting in a widespread perception that it does not truly belong to the community.
- Some members of the community may believe that water supply should be a government service and disagree with the concept of community ownership and responsibility.

Limitations of Community Management (CM)

(Harvey & Reed, 2007, p. 370)

- CM often relies on voluntary inputs from community members, which people may do for a while but are reluctant to do in the long term; there are often no long-term incentives for community members.
- Key individuals on the water committee leave the community or die, and there is no mechanism to replace them with trained individuals.

Limitations of CM (cont.)

(Harvey & Reed, 2007, p. 370)

• The community organization charged with managing the water supply loses the trust and respect of the general community. This may be related to a lack of transparency and accountability, and lack of regulation by a supporting institution (e.g., local government).

Limitations of CM (cont.)

(Harvey & Reed, 2007, p. 370)

 Failure by community members to contribute maintenance fees leads to disillusionment among committee members who abandon their roles. This may be due to a lack of legal status and authority of the water committee or lack of community cohesion.

Limitations of CM (cont.)

(Harvey & Reed, 2007, p. 370)

- Communities have no contact with local government (or the implementing agency) and feel that they have abrogated responsibility for service provision; communities therefore feel abandoned and become demotivated.
- Communities are too poor to replace major capital items when they break down.

Potential Solutions

(Harvey & Reed, 2007, p. 372)

- Provision of household and small user-group water supplies, and
- Implementation of private sector service delivery models.
- Provision of institutional support to communities.

Conclusions

"Although community *participation* remains indispensable for sustainable rural water provision in Africa, community *management* does not. . . . That is not to say that community management should be discarded in all situations, but rather that it can only become *sustainable* with appropriate institutional support, which is currently lacking in most cases" (Harvey & Reed, 2007, p. 375).

Conclusions (cont.)

(Harvey & Reed, 2007, p. 375-376)

- CM has not delivered satisfactory levels of service sustainability. . . .
- Greater agency accountability and greater government accountability are needed in the ongoing provision of rural water supplies. . . . [They] must recognize the need for long-term support for CM and develop strategies to provide this accordingly.
- There is a need for realism rather than idealism when working with rural communities in sub-Saharan Africa. . . . Recognition of community heterogeneity and the rights and preferences of individuals is paramount.

Conclusions (cont.)

(Harvey & Reed, 2007, p. 375-376)

- Current misconceptions relating to ownership need to be challenged. . . . It should not be made the goal in itself with the implicit assumption that it is the principal prerequisite for sustainable water provision.
- Incentives for CM should be assessed for individual communities, and household and private sector options should be explored where there is resistance to CM.

Our Challenge

Providing appropriate assistance: profoundly respectful, adequate, well-calibrated



References

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