Journal of Policy and Development Studies

[ISSN 2958-1141]
Volume: 02 Issue: 01 | Feb-2023

JPDS

Analysing women's perceptions of sustainability of LAKWA'S water kiosks services and benefits

Author
Paul Mutinda Kituku
Email: pmkituku@gmail.com

St Paul's University, Kenya.

Cite this article in APA
Kituku, P. M. (2023). Analysing women's perceptions of sustainability of LAKWA'S water kiosks services and benefits. *Journal of policy and development studies*, 2(1), 88-94. https://doi.org/10.51317/jpds.v2i1.336

A publication of Editon Consortium Publishing (online)

Article history
Received: 30.12.2022
Accepted: 31.01.2023
Published: 21.02.2023

Scan this QR to read the paper online

Abstract
This study focused on analysing women's perceptions in relation to the sustainability of LAKWA's water kiosks services and benefits in Mpeketoni, Lamu County, Kenya. The study relied on the theory of the ladder of participation and Sarah Longwe's theory of empowerment. It employed mixed-method design in which qualitative and quantitative methods were used in collecting and analysing data. Data were collected using open and closed-ended questionnaires. The study had 200 respondents comprising 100 women from rural settlements and 100 women in the Mpeketoni division of Lamu County in Kenya. It's evident that most respondents positively perceive large families seeing more benefits of LAKWA kiosks than small families, mostly for domestic uses. These are common expectations since the water quantity raised by large families is higher than that of small families. Furthermore, it's their perception that the situation will remain the same for the next 10 to 20 years. This study recommends that further research on ways of including women's perceptions in water management planning to improve the water intake and efficiency of the LAKWA water system should be carried out.

Key terms: Public standpoints, water kiosks, water management.

INTRODUCTION

The world Target, 6.1 of the Sustainable Development Goals, sets to ensure that, by 2030, universal and equitable access to clean and affordable water will be available for all (Organization & UNICEF, 2017). It is estimated that 5.2 billion people globally employed safely managed drinking water services in 2015. This left an estimated 2.1 billion people without the services (Organization & UNICEF, 2017). Some of these populations may, to some extent, have unreliable supply to improved water sources due to factors touching on distance, price of water, management of the systems, the quantity of supply and security. It is necessary to note that the vast majority of these populations who have access to improved water sources rely on a utility water service delivered out-of-house through public standpoints and kiosks (Gasson, 2017). 263 million people use more than 30 minutes per trip to collect water from a source far from their residential (UNICEF, 2018b). This burdens girls and women – they are responsible for fetching water in 8 out of 10 households without piped water supply (Slaymaker & Bain, 2017).

This framework's aim was to empower women by enabling them to attain equal control over the production factors and participate equally in the development process. It clearly evaluates the impacts on empowerment as positive, neutral or negative. It's negative when the project does not factor in its objectives the women's issues. It's neutral when the project mentions women but does not involve them, so it leaves them as passive actors in the project. When the project is very concerned with women and involves them in improving their position in society, it is a positive thing, and it will not only empower them but ensure the sustainability of the project. This is the ultimate way for a community water project; since the woman suffers the most due to water insecurity, they will be passionate and concerned about accessibility.

Investments to improve water supply to households have relied on donor funding to support LAKWA, which has invested in boreholes, water treatment and distribution. However, because of resource constraints, improvements in water supply take the form of a two-tier approach where economically able households receive water via piped water connections, while those who cannot afford it are provided with water via water kiosks. Very limited research has been conducted in investigating the impacts of this economic model on the perceived sustainability of water kiosk benefits. Moreover, given the requirement that women are required to participate in the management of water distribution infrastructure, largely water kiosks, there is a paucity of research on how this requirement impacts water service provision, women's livelihoods, and customer satisfaction with services.

LITERATURE REVIEW

Gender mainstreaming is a key target under SDG 5, acquiring gender equality. Engendering women in water management is a great milestone that remains on paper and is rarely achieved in many societies. Women's roles are viewed by many societies as their biological reproduction rather than their contribution to water management. According to the findings of research on "Women participation in community water management projects in Buhera" by Chinamasa and Mavhiza cited project implementers' lack of involving women as a reason for most of them remaining passive in the implementation and management. The members of the NGOs play a greater role in project implementations and management, leading to unsustainable projects. All services provided by women are geared towards ensuring the healthy maintenance of their families, including cooking, cleaning, and child care. Because reliable and convenient access to potable water is important in helping women fulfil these tasks, donors and governments often assume that women's primary strategic interest in water relates to their domestic roles and not management.

The effective contribution of women in society adds an important human resource to the challenges of progress, development and growth. Water is considered one of the determinants of development. Women often face some challenges in social, cultural and economic when it comes to development projects. Despite these challenges, women have continued to be silent, invisible actors, as cited by Gedo and Morshed in their research carried out in Lamu. Women's participation in development projects can have several benefits. This contributes to the achievement of specific project objectives of functioning and use of facilities and also to the

attainment of a wider development goal. Participation has both direct and indirect benefits for the women themselves.

As domestic managers, women decide where to collect water for various purposes and, in various seasons, how much water to collect and how to use it. In the case of Sri Lanka and India, women took up their roles and went against the traditional norms to prove their abilities. The potential contribution of women to their objectives emerged after the project succeeded and their voices were heard in community issues. This is not logical from their traditional participation in water supply and sanitation. In their choice of water sources, they make reasoned decisions based on their own criteria of access, time, effort, water quantity, quality, and reliability. In addition, much of the informal learning about water and sanitation takes place through interpersonal contact between women. Thus, their opinions and needs have important consequences for the acceptance, use and readiness to maintain new water supplies and for the ultimate health impact of the project.

On the other hand, there are many accounts of specific contributions of women resulting in direct benefits to the projects and communities. Other projects have benefited from their knowledge of local socio-cultural and environmental circumstances, including the identification of reliable water sources of acceptable quality and accessibility, reduction in construction costs by having shorter line tracks, thus enabling more communities to be served with the material available; adaptation of the design of equipment for improved operation and use; and socially acceptable arrangements for sharing facilities. Sustainable management of water resources is seen as vital for economic growth, public health, food security, and stable societies (WHO, 2018). Access, availability and affordability to water and sanitation are seen as essential for sustainable development and poverty eradication (Mwanza & Engestrom, 2005).

The sustainability of water and sanitation systems is often problematic in the absence of year-round use of the systems. In some cases, to save time, women will use closer sources of water, even if the water quality is not optimal. In other cases, the financial contributions needed to maintain the system may become too burdensome for communities after donor support has ended, and systems may remain in disrepair for long periods. The lack of local expertise to repair and maintain systems also continues to be a problem, as is the unavailability of spare parts.

METHODOLOGY

The research used mixed-method design in which quantitative and qualitative methods were used to collect and analyze data. Data was collected using open and closed ended questionnaires. The research had 200 respondents comprising 100 women from rural settlements and 100 women in the urban settlements in Mpeketoni division of Lamu County in Kenya.

RESULTS AND DISCUSSION

Benefits achieved of Implementing LAKWA Water Kiosk System

Results from the open-ended questions showed that the majority of the respondents cited the portability and safety of LAKWA water, and 46 per cent cited the safety and portability of LAKWA water as the biggest benefits. This is a great observation from the community as it meets the threshold for agenda four. They also cited the closeness of the LAKWA water kiosks to the community as the second most benefit, mentioned 46(23 %). Looking at the research by Gedo and Morshed, inadequate accessibility as a water inadequacy cause is contrary to their findings.

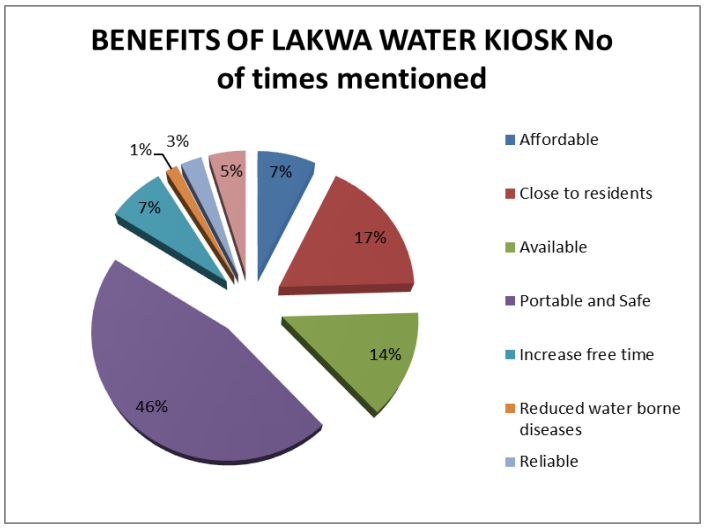

Figure 1: Benefits of Lakwa Water Kiosk

Table 1: Benefits of LAKWA'S Water Kiosks

Benefits associated with relying on LAKWA's Water Kiosks as sources of water	Family Size	Agree	Neither agree nor disagree	Disagree
a) **Improved** Quality of drinking water for my household	Small	7 %	3 %	90 %
	Large	7 %	19 %	74 %
b) **Reduced** amount of money spent on buying water	Small	28 %	12 %	60 %
	Large	39%	3 %	58 %
c) **Reduced** amount of time spent collecting water	Small	19 %	5 %	76 %
	Large	24 %	5 %	71 %
d) **Increased** availability of water for washing utensils	Small	25 %	9 %	66 %
	Large	47 %	3 %	50 %
e) **Increased** availability of water for bathing	Small	25 %	8 %	67 %
	Large	45 %	4 %	51 %
f) **Increased** availability of water for washing clothes	Small	28 %	6 %	66 %
	Large	45 %	4 %	41 %
g) **Increased** availability of water for watering vegetables	Small	50 %	8 %	42 %
	Large	65 %	1 %	34 %
h) **Increased** availability of water for watering livestock	Small	38 %	9 %	53 %
	Large	53 %	8 %	39 %
i) **Reduced reliance** of other water sources	Small	36 %	8 %	56 %
	Large	48 %	8 %	44 %
j) **Increased time** my children spent reading, playing, doing schoolwork	Small	26 %	21 %	53 %
	Large	46 %	16 %	38 %
k) **Reduction in the number** of waterborne illnesses, typhoid, diarrhoea	Small	45 %	27 %	28 %
	Large	56 %	19 %	25 %

(Source: Field data 2018)

When asked about the benefits of relying on LAKWA water, 14/21 uses respondents disagreed on the benefits. Taking into account key resource areas in community development, quality, cost, time and availability, the majority of respondents, both small and large families, disagreed that LAKWA met expectations. On the quality of drinking water, the majority of small families, 91 per cent, disagreed that LAKWA water had improved its quality, while a majority of large families, 74 per cent, equally disagreed that it improved their lives. When we talk of vision 2030 and agenda 4 on improving the lives of citizens, this will not be realised if we lack to improve the quality of drinking water.

When asked about the reduction of the cost of water, the majority of the respondents, 60 per cent of small families and 58 per cent of large families disagreed that LAKWA water helped them save money spent on water. This is an indicator that these people may look for alternative sources of water, exposing them to poor hygiene and health hazards. On the time reduction to fetch water, the majority of the respondents, 76 per cent of the small families and 71 per cent of the large families, disagreed that LAKWA water reduced the time. When time is wasted while fetching water, it means that the funds for undertaking development activities are reduced.

When asked about the availability of water for washing utensils, the majority of the small families, 66 per cent, disagreed that they benefited from LAKWA water. This is another perception that women have in Mpeketoni location of Lamu County, Kenya. Most of the women identified LAKWA water portability as the biggest benefit, with the kiosks' closeness to the residents being the second biggest benefit. It was very strongly agreed by both women in the rural and urban without children that the benefits are the same. The majority of small families, 67 per cent, completely disagreed that LAKWA water increased availability of water for bathing, while majority of the large families, 51 per cent, also disagreed that it increased availability of water for bathing. Majority of the small families, 66 per cent, completely disagree that availability of LAKWA water improved water for washing clothes, while majority of large families, 45 per cent, agree that they have enough water for laundry work. Majority of the small families, 50 per cent, completely agree that they use LAKWA water for watering vegetables, with the majority of the large families, 65 per cent, also agreeing that they have readily available water for watering their vegetables.

Majority of the small families, 53 per cent, disagree that the LAKWA water increased available water for their livestock, while the majority of the large families, 53 per cent, agree that they had benefitted from LAKWA water for their livestock. Most of the small families, 56 per cent, completely disagree that LAKWA water is available; it did not reduce their reliance on other sources of water, while the majority of the large families, 48 per cent, agree that they reduced their reliance on other sources of water. This clearly shows that most of these small families do not use LAKWA water for domestic uses. They still use other sources of water, including boreholes and shallow wells, which put them at risk of waterborne diseases.

Looking at the time saved for using LAKWA water, the majority of small families, 53 per cent, do not agree that they save any time. While the majority of the large families, 46 per cent, agree that their children have more time to do other duties and responsibilities. On the reduction of waterborne diseases, the majority of the small families, 45 per cent, agree that they see it as a benefit from using LAKWA water. Equally, the majority of the large families, 56 per cent, agree that they benefitted by reducing waterborne diseases.

Whereas LAKWA is packaged to bring household water solutions to the community in Lamu County, the majority of the small communities do not agree and or view LAKWA as such, and this compounds the water crisis that requires a solution. The majority of the large family partly agree, and thus gives an indication of the large families being more in need of portable clean water. The burden of water is more felt in large families who have even reduced the use of other sources of water for domestic uses like washing clothes, watering livestock and watering vegetables.

Perceptions of Sustainability of LAKWA Water Kiosk

On asking respondents about their views of the future of the LAKWA water user project, the majority of them

did not foresee any improvement from the current situation.

Table 2: Perceptions of Sustainability of LAKWA Water Kiosk

In the next 10 to 20 years, What do you think will happen to the use of water kiosks in Mpeketoni, particularly as concerns the following?		Decline Significantly	Somehow Decline	Remain the same	Increase somehow	Increase significantly
a) In the next 10 to 20 years, the quality of water sold from LAKWA's water kiosks……	Small	4.7 %	0 %	4.7 %	76.7 %	14 %
	Large	11.3 %	0 %	5.6 %	32.4 %	50.7 %
b) In the next 10 to 20 years, the availability of water from LAKWA's water kiosks during dry season….	Small	1.6 %	1.6 %	77.5 %	10.1 %	9.3 %
	Large	16.9 %	5.6 %	35.2 %	8.5 %	33.8 %
c) In the next 10 to 20 years, the number of LAKWA's water kiosks in the area.	Small	3.1 %	1.6 %	45 %	40.3 %	10.1 %
	Large	8.5 %	0 %	31 %	22.5 %	38 %
f) In the next 10 to 20 years, the frequency of breakdowns in LAKWA's water infrastructure……	Small	12.4 %	9.3 %	65.9 %	6.2 %	6.2 %
	Large	28.2 %	14.1 %	35.2 %	8.5 %	14.1 %
g) In the next 10 to 20 years, the number of households relying on LAKWA's water kiosks for water….	Small	9.3 %	7.8 %	45 %	24 %	14 %
	Large	11.3 %	2.8 %	23.9 %	21.1 %	40.8 %
i) In the next 10 to 20 years, the conflicts over water queues at the water kiosks…	Small	31 %	34.1 %	25.6 %	3.1 %	6.2 %
	Large	54.9 %	19.7 %	9.9 %	2.8 %	12.7 %
j) In the next 10 to 20 years, the reliability of water supply, that is, the number of hour's water available in a week in LAKWA's water kiosks…	Small	7.8 %	12.4 %	62.8 %	12.4 %	4.7 %
	Large	11.3 %	16.9 %	32.4 %	5.6 %	33.8 %
k) In the next 10 to 20 years, the price of water from LAKWA's water kiosks…	Small	4.7 %	14 %	69 %	6.2 %	6.2 %
	Large	25.4 %	19.7 %	35.2 %	5.6 %	14.1 %
l) In the next 10 to 20 years, the incidences of vandalism of LAKWA's water kiosks….	Small	7.8 %	6.2 %	81.4 %	1.6 %	3.1 %
	Large	33.8 %	14.1 %	38 %	2.8 %	11.3 %

(Source: field data 2018)

When asked about the quality of LAKWA water in the next 10 to 20 years to come, the majority of the small families, 76.7 per cent, believe that the quality of water will somehow increase, while the majority of the large families, 50.7 per cent, foresees the quality improving significantly. This is a scenario that has been mainly occasioned by the current climate change that saw most of the population spending more time in the area looking for clean water. The dwindling lake Kenyatta, the water catchment facility in the area, is drying up. Efforts should be put in place to save the lake and devise ways to improve the quality of drinking water.

When asked about the availability of LAKWA water in the next 10 to 20 years, the majority of the small families, 77.5 per cent, believe that there will be a continuous supply of water during the dry season. This is also supported by most of the large families, 35.2 per cent, who say the supply shall remain the same. There is a lack of hope among small families in regard

to continued breakdowns being witnessed, with 65.9 per cent of small families opining that the situation will not improve. 35.2 per cent of the large families also feel that the level of breakdowns will still be experienced. The population is increasing every day, and thus demand for water will increase the water system is getting older, exposing it to age-related breakdown and vandalism from pastoralists who are looking for water.

The results of the research clearly showed that most of the respondents believed that the current situation would remain the same for 10 to 20 years to come. This shows that most of the residents, both in the rural areas and urban centres, have a grim picture of LAKWA in future, improving the services and expanding the system. Women, being the ones responsible for fetching water in the majority of the communities across the sub-locations under study, have lost faith in the situation improving and making their burden easier.

CONCLUSION AND RECOMMENDATION

Conclusion: According to this research, it's evident that the majority of respondents have a positive perception of large families seeing more benefits of LAKWA kiosks than small families, especially for domestic uses. These are common expectations since the quantity of water raised by large families is higher than that of small families. It's their perception that the situation will remain the same for the next 10 to 20 years. Once the conflicts decrease and the LAKWA water quality improves, they seem not worried about the distance to water kiosks, as concluded by Gedo and Morshed in their journal, constraints of accessibility that there are infrastructural constraints.

Recommendation: Based on the results of this study's findings, further research on ways of including women's perceptions in water management planning to improve the water intake and efficiency of the LAKWA water system should be carried out. Whereas these areas are vital to reassuring the users/consumers, it's essential for the future strategy of LAKWA and, indeed, other water stakeholders in ensuring that it meets the objectives of sustainable development goals and vision 2030 on water and sanitation.

REFERENCES

Chinamasa, E., & Mavhiza, F. M. (2014). Participatory water sources management model for schools: Case of Buhera district, Zimbabwe. *Journal of Humanities and Social Science*, *19*(4).

Gasson, C. (2017). A new model for water access. *Blueprint for Innovation*, 2014–2016. Water Leaders.

Gedo, H. W., & Morshed, M. (2013). Inadequate accessibility as a cause of water inadequacy: a case study of Mpeketoni, Lamu, Kenya. Water Policy, 15(4): 598–609. https://doi.org/10.2166/wp.2013.009.

Mwanza, D., & Engestrom, Y. (2005). Managing content in e-learning environments. *British Journal of Educational Technology*, *36*(3), 453–463. https://doi.org/10.1111/j.1467-8535.2005.00479.x.

Organization, W. H., & UNICEF. (2017). *Progress on Drinking Water, Sanitation and Hygiene: 2017 Update and SDG Baselines.*

Slaymaker, T., & Bain, R. (2017). *Access to Drinking Water around the World – in Five Info Graphics*. http://www.theguardian.com/global-development-professionalsnetwork/2017/mar/17/access-to-drinking-water-world-six-infographics.

UNICEF, W. (2018b). *WHO/UNICEF Water Supply Statistics, 2015-knoema.com*. https://knoema.com//WHOWSS2014/who-unicef-water-supply-statistics-2015.

WHO. (2018). *WHO | UN-Water Global Analysis and Assessment of Sanitation and Drinking-water (GLAAS)*. http://www.who.int/water_sanitation_health/monitoring/investments/glaas/en/.