

## Decentralization and Water Service Delivery in Dar es Salaam

Eston Kwach\*, Charles Adam and Rashid Abdalla Shangazi

Kampala International University Dar es salaam College, Tanzania

### Abstract

This study focused on the examining the increased attention to water in decentralization which is an issue that needs immediate action because without water there is no life. One way to improve performance of water service delivery is to fully decentralize this service and allow the decisions relating to water service delivery to be locally made for the local development.

This study examined the impact of decentralization on water service delivery in Ukonga ward, Ilala District of Dar Es salaam, Tanzania. Existence of few empirical studies on the impact of decentralization on water service delivery is the motivation for this study. The study adopted a descriptive cross-sectional survey design that involved the use of questionnaires and interviews in collecting data from a sample of 375 respondents randomly selected from a population of 19,290 households of Ukonga ward.

The study recommends that all the government through its agents responsible for water service delivery such as DAWASCO (Dar es salaam Water and Sewerage Corporation) and other agents in the local government level needs to use more resources and take a proactive approach in order to solve these problems such as; the price of piped water, the cost of water connection, cost of water maintenance, accessibility of water from DAWASCO well and access of piped water from DAWASCO. Finally the government should fully implement its policy of decentralization by devolution so that services such as water can be realistically closer to the people.

**Keywords:** Decentralization; Water service delivery

### Introduction

Increased attention to water in decentralization is an issue, inadequate attention is being paid to effect of reform on the less advantaged populations – rural areas, small towns, and semi-urban areas. Despite the fact that water is life-and yet not everyone has safe and secure access to this finite resource, for example; over 1.1 billion people worldwide lack access to safe drinking water [1]. Pronk [2] pointed out that decentralized water supply systems do not offer the possibility to provide safe *drinking water* and supply systems are not feasible due to technical, economical or institutional reasons. Increasingly municipalities are asked to assume responsibility for service delivery [3].

Among the decentralized public services in Tanzania is water as provided in the Tanzania National Water Policy where water is regarded as a 'Public good' [4]. According to the same source, The National Water Policy targeted on providing universal access to safe water and sanitation by 2025 with the involvement of communities and the private sector. This reflects a changing policy approach, with the government's role shifting away from the direct provision of services to coordination, policy formulation and regulation [4]. As part of the government's commitment to decentralization, Urban Water and Sewerage Authorities (UWSAs) were established across the country with District Urban Water and Sewerage Authorities (DUWSAs).

Additionally, water policies in Tanzania are developed in line with Development Vision 2025 and the National Strategy for Growth and Reduction of Poverty (NSGRP), better known under Swahili name MKUKUTA (Mkakati wa Kukuza Uchumi na Kupunguza Umasikini Tanzania) [5]. It is also important to note that availability, accessibility, affordability and quality of water is very important. Billions of people, relying on unsafe drinking water sources worldwide Millions are in Tanzania, where clean water is becoming scarcer by the day [6].

### Water Quality and Affordability in Dar es salaam

According to Pigeon et al., [7], after independence water supply

in the Dar es salaam was directly managed by the Ministry of Water and Power. In 1977, the department in charge was turned into a Parastatal company, the National Urban Water Authority (NUWA). Until 1991, those whose property was directly connected to the system had to pay for water while the water delivered at kiosks was free. A 1997 reform transformed NUWA into the Dar es Salaam Water and Sewerage Authority (DAWASA), a semi-independent entity aiming at financial autonomy, and combining for the first time both water supply and sanitation. But the last significant investments in the system dated back to the 1970s and had not been followed by proper maintenance, upgrades or expansions to cope with the city's rapidly increasing population. Thus, the system was in a terrible state by the early 1990s, with high levels of disrepair, unaccounted for water, major financial losses, demotivated workers and very low coverage. The report of Water Aid Tanzania [8] revealed that an attempt to privatize water service delivery failed after the government termination of the contract of City Water Services (CWS) in 2005 which later opened a new door for public successor DAWASCO to take over the responsibility of water service delivery.

Presently, in Dar es Salaam, two public sector institutions are officially responsible for the provision of water and sewerage services. The Dar es Salaam Water and Sewerage Authority (DAWASA) is the

**\*Corresponding author:** Eston Kwach, Lecturer Faculty of Development and Management; areas of specialization include Project Planning, Public Administration, Public Relations, Public Sector Management and Ethics and Governance. Kampala International University Dar es salaam College, Tanzania, Tel: +256-752-934297; E-mail: [esauko@yahoo.com](mailto:esauko@yahoo.com)

**Received** October 05, 2016; **Accepted** November 21, 2016; **Published** November 28, 2016

**Citation:** Kwach E, Adam C, Shangazi RA (2016) Decentralization and Water Service Delivery in Dar es Salaam. Arabian J Bus Manag Review S3: 002. doi: 10.4172/2223-5833.S3-002

**Copyright:** © 2016 Kwach E, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

responsible and the owner of the city’s water supply infrastructure. Meanwhile, the operational management of supply has been delegated to a public utility, Dar es Salaam Water and Sewerage Corporation (DAWASCO). This institutional framework is the outcome of a failed attempt at a full-fledged privatization of the city’s water sector [9]. Nearly 90% of the city’s formal water supply originates from the Ruvu River, and the rest is provided by DAWASA boreholes. Much of the infrastructure in the city were established during colonial years, more than 30 years ago, and is located in the city’s more affluent areas [10]. According to DAWASA, only a quarter of the city’s residents receive piped water [6]. In the absence of sufficient quantities of safe water, the high-lying areas and those farthest from the Ruvu River suffer most in times of shortage [10].

## Materials and Methods

### Study area and target population

The study was carried out in Ukonga ward of Ilala Municipality which is one of three municipalities in Dar es Salaam in Tanzania. Ukonga ward is one among the 26 wards found in Ilala municipality and it has a diverse cosmopolitan urban and peri-urban population, which provided a rich sample for the study.

### Sampling

The study involved residential users or households that use the water supplied by DAWASCO. Another category of respondents included the officials from the water supply company (DAWASCO) and also other officials from Ilala municipal council. As the users of the water, the residents would be able to provide data on the objectives of affordability and accessibility of decentralized water service delivery in Ukonga ward. Due to the large number, the residential users were sampled using probability sampling, by means of stratified random sampling to give everyone an equal chance while the key informants from the DAWASCO and Ilala Municipal council were sampled using purposive sampling.

### Sample size

Regarding the sample calculation, out of 19,290 households only 375 was sampled using Krejcie and Morgan [11] and also all the target respondents from DAWASCO and Ilala Municipality took part in the study. The respondents also included four (4) officials each from DAWASCO and Ilala Municipality (Table 1).

### Data analysis

The analysis was done on the basis of objective by objective in

No.	Particulars	Population	Sample (respondents)
1.	Residential users	19,290	375
2.	DAWASCO officials	38	4
3.	Municipal council officials	87	4
Total		19,415	383

Table 1: The distribution of respondents in the study.

Affordability of water service delivery in Ilala Municipality	SA	A	D	SD
The price of piped water is affordable in Ilala municipality	1.2	38.9	59.9	0
The cost of water connection is affordable in Ilala municipality	0.9	17.5	78.9	2.7
The of water maintenance is affordable in Ilala municipality	0.9	14.8	77.6	5.3
The means of payment of water service are convenient in Ilala municipality	3.0	95.0	2.1	0
The price of vended water is affordable in Ilala municipality	11.6	88.1	0.3	0

Table 2: Findings on the affordability of water service.

which Frequencies and percentages was used to analyze demographic characteristics of respondents, Means and standard deviation was used to analyze the impact of decentralization on water service delivery.

The researcher used a computer package technique, Statistical Package for Social Scientists (SPSS), to analyze quantitative data obtained from household questionnaire responses. Narrative analysis was used in interpreting findings from interviews to counter check the findings Likert scales data collected using questionnaire and to provide a better understanding of the findings obtained from quantitative data.

## Results and Discussion

The study was analyzed according to objectives which were;

1. To evaluate the households’ affordability of water service delivery in Ukonga ward.
2. To investigate the level of accessibility of water service to the households of Ukonga ward.
3. To examine the impact of decentralization on water service delivery in Ukonga ward.

The first objective examined the households’ affordability of water service delivery in Ukonga ward and it covered issues such as:

- a. The affordability of the price of piped water
- b. The cost of water connection
- c. The cost of water pipes maintenance
- d. The convenience of means of payment to the users
- e. The affordability of the price of vended water.

The data was analyzed in percentages (%)

The findings in Table 2 on the affordability of water service delivery in Ilala municipality revealed that most respondents feel that the price of piped water, the cost of connection and the cost of water maintenance are all unaffordable which conforms to the study by Dagdeviren [12] which also found that there was a high rate of unaffordability of water in Lusaka city, which is a similarly urban context like Ilala of Dar es salaam. However majority of respondents felt that the price of vended water was affordable and that the means of payment of water bills was convenient.

The second objective investigated the level of accessibility of water service to the households of Ukonga ward, it covered areas such as;

- a. There is accessibility to piped water from DAWASCO.
- b. There is access to water from DAWASCO wells.
- c. There is access to community water point.
- d. There is dependence on water from streams and rivers.
- e. There is dependence on water delivered from private vendors.

The data were analyzed in percentages (%)

You have access to piped/tap water from DAWASCO	SA 1.5	A 3.3	D 89.0	SD 6.2
You have access to water from a DAWASCO well	5.3	39.5	59.9	3.3
You have access to water from community well/water point	7.4	23.1	69.4	0
You depend on water from rivers/streams	0.3	62.3	37.4	0
You have access to water delivered by private water vendors	29.4	70.6	0	0

**Table 3:** Findings on the level of accessibility of water service.

The findings in Table 3 on the level of accessibility of water service to the households of Ukonga ward, found that there is no access to piped water from DAWASCO to the majority of people of Ukonga ward, also most people do not have access of water from DAWASCO well nor community water point but on the other hand, most people depend on water from private vendors which conforms that there was success of private water supply in Latin America and there was increased portable water supply by 26% after the government concessioned the water supply to private entities.

The third Objective examined impact of decentralization on water service delivery. The findings based on interviews conducted on the officials of DAWASCO and also the officials from the Ilala Municipal council. Some of the findings include;

Most of the respondents interviewed are of the opinion that there is no tangible impact of decentralization on water service delivery to majority of respondents but the impact is only felt among very few people the water delivery. This has been accounted due to the following reasons;

Most respondents are of the opinion that there is a general poor implementation of decentralization water delivery policies by the agency and the municipal authority. They believe that even though many good policies are formulated but there is lack of implementation, hence the outcome of these programs and even impact of decentralization is not felt. Some of reason reasons for this are;

- i. Bureaucracy and slow implementation is another factor seen to be a contributing factor to the failure of implementation of decentralization water delivery programs.
- ii. Corruption whereby funds meant for equipments and program are embezzled by the officers at the water department. This has led to poor implementation of water delivery and hence negative impact. One instance of corruption has been mentioned as being propagated by officers who also engage water vending business. Such a conflict of interest and corruption makes water delivery difficult.
- iii. Lack of proper funding is another factor mentioned as hindering decentralization delivery of water services in Ukonga ward. Most of the decentralization units such as municipal councils are poorly funded and hence there is no enough funds to purchase the necessary technology for implementing the water delivery in Ukonga ward.
- iv. There is also a lack of adequate technology in implementing water delivery in Ukonga ward. Adequate technology is necessary because most of the water exists deep underground and it requires advanced technology to dig wells and boreholes, constructing of pipes to supply water.

## Conclusions

The cost of connection and the cost of water maintenance are all unaffordable even as the price of vended water remains affordable and

the means of payment of water bills are convenient. These findings conform to the study by Dagdeviren and Robertson [12].

Piped water and water from wells and community water points are inaccessible to the majority of people even as most people depend on water supplied from the private vendors.

There is no tangible impact of decentralization on water service delivery to majority of respondents but the impact is only felt among very few people the water delivery. This has been accounted due to reasons such as; general poor implementation of decentralization water delivery programs by the agency and municipal authority.

## References

1. Quesada CA (2011) Soils of Amazonia with particular reference to RAINFOR sites. *Biogeosciences* 8: 1415-14410.
2. Pronk (2012) Exposure assessment in environmental epidemiology. Oxford University Press. Newyork.
3. Myerson (2014) Democratic Decentralization and economic development.
4. URT (2002) National water policy United Republic of Tanzania.
5. World Bank (2012) Annual Report, 2012. The World Bank, Washington DC, USA.
6. URT (2010b) Water sector status report, Ministry of water and irrigation, United Republic of Tanzania.
7. Pigeon (2012) Water governance: An evaluation of alternative architecture. Edward Edgar Massachusetts, USA.
8. Water Aid Tanzania (2003) National water sector Assessment in Tanzania. Water Aid-Water for life, London.
9. De Waal, Cooksey (2011) Services supply chain; the role of the domestic private sector in water service delivery in Tanzania, UNDP, Newyork.
10. Kjellen M (2006) From public to private hands; Water access and distribution in Dar es salaam, Tanzania.
11. Krejcie RV, Morgan DW (1970) Determining sample size for research activities. *Educ Psychol Meas* 30: 607-610.
12. Dagdevine H, Robertson SA (2008) Reforming without resourcing: The case of Lusaka water supply in Zambia, UNDP, New York.

**Citation:** Kwach E, Adam C, Shangazi RA (2016) Decentralization and Water Service Delivery in Dar es Salaam. Arabian J Bus Manag Review S3: 002. doi: 10.4172/2223-5833.S3-002

This article was originally published in a special issue, : **Emerging prospects on Business Research at Marketing/Entrepreneurship Interface** handled by Editor. Lam, Kevin CK, CUHK Business School, Hong Kong