

Denying access to water? Moral values and commercialization policies in Khartoum governmental water management

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Introduction

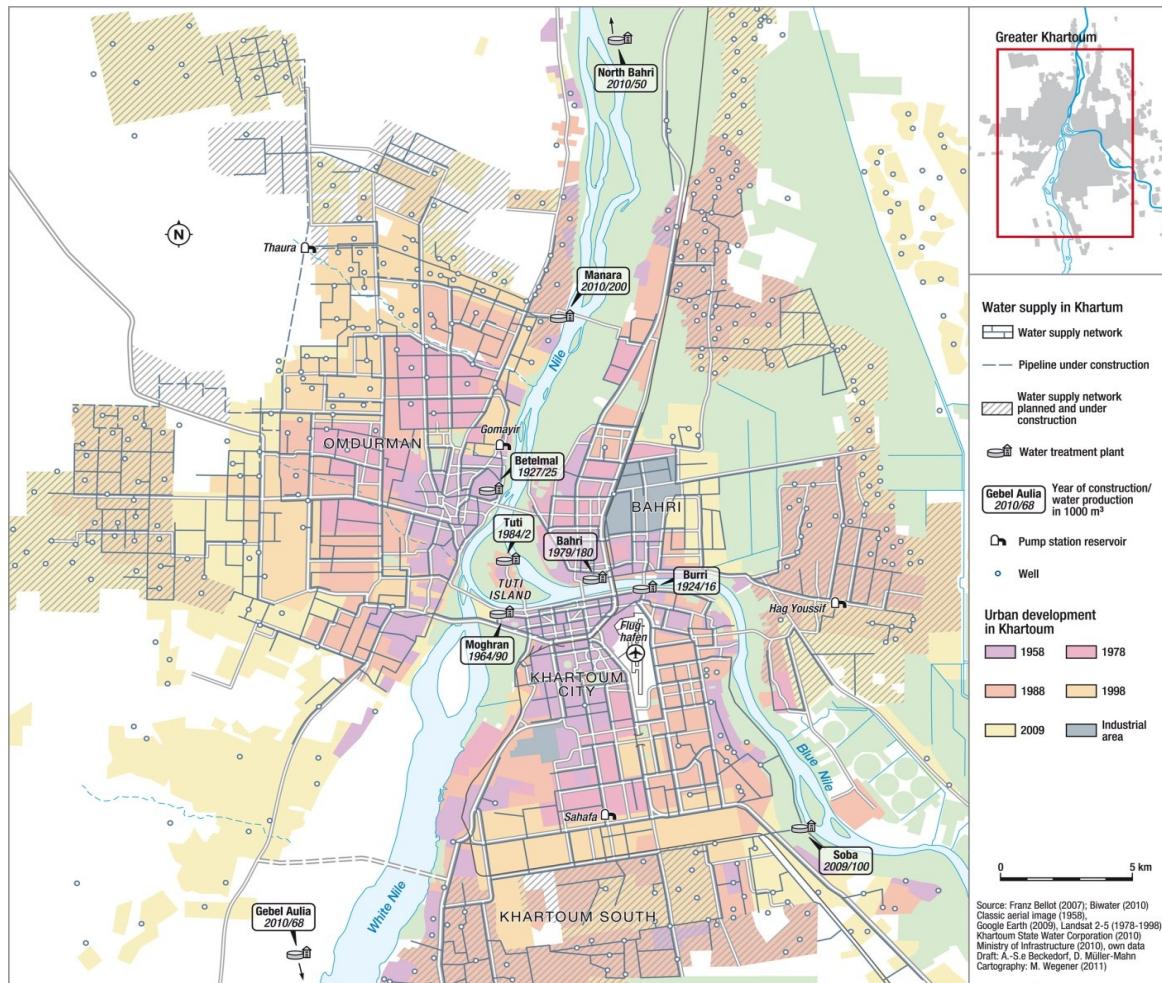
In the wake of neoliberal reform policies of the current Sudanese government which came to power in 1989, Khartoum governmental water management has in recent years undergone important transformations. These transformations had various impacts on the governance of water management. In the context of a general budget shortage, trends to privatization and commercialization were considered as a means to tackle the constant lack of water supply in the fast growing metropolitan capital area, where more than one third of the inhabitants are not connected to the governmental water network. While on the one hand side, these trends were pushed forward, they remained on the other hand strongly contested within the main governmental water supply body, the Khartoum State Water Corporation (KSWC), which is linked to the Khartoum State Ministry of Water and Environment. One important reason for these contestations are the value systems of several KSWC employees, who perceive water supply to a great extent as a moral obligation regardless of economic criteria, and who reject any denial of water access for economic reasons.

Following Groenfelt (2010: 575) who states that “water policies are based on ethical assumptions”, this contribution therefore draws on empirical fieldwork carried out in 2009/2010 in order to examine the role of value systems in recent commercialization policies of Khartoum governmental water management. The first section provides background information about the current water supply system in Khartoum, which is a necessary precondition to understand current reform processes. The second section singles out three major aspects of commercialization policies and their contestations in greater detail: increases in water prices, increases in water cuts in case of unpaid water bills, and installations of prepaid water meters. The third section summarizes these contestations and argues that value systems are one major reason why current reform processes are not implemented in the way they were perceived.

¹ For more information about WAMAKHAIR, see: www.wamakhair.uni-bayreuth.de. The empirical findings which are presented in this paper draw to some extent on Beckedorf (2012; forthcoming).

The water supply system in Khartoum

Figure 1: Urban development and water supply of Greater Khartoum²



After the independence of Sudan in 1956, the number of inhabitants in Greater Khartoum increased in the wake of improved means of transportation and growing extended manufacturing industries (El Bushra 1972/1980: 269). Different sources (Denis 2005; Pérouse de Montclos 2001: 8; El Bushra 1972/1980: 269; Lobban 2007: 286; cf. Pantuliano et al. 2011: 3; UN Habitat 2009: 19; Sudan Census 2008) consider the current population of Greater Khartoum between 5.5 million and 6.5 million and estimate that the number of inhabitants of Greater Khartoum has increased more than fourfold since the 1980s. These estimations show that in the past decades, Greater Khartoum witnessed an enormous and accelerated population growth. Beyond natural growth rates, the enormous increase of Greater Khartoum's population is to a great extent triggered by migration. Migration to Khartoum on a large scale started in the 1970s and 1980s, when thousands of international refugees came to the Sudanese capital from Ethiopia, Chad and Uganda, fleeing from famine

² Sources: Müller-Mahn et al. (2010: 40); Beckedorf (2012 forthcoming).

and internal armed conflicts (Tetzlaff 1993: 89; Pérouse de Montclos 2001: 7; El Bushra/Hijazi 1995: 505; Pantuliano 2011: 6). Millions of migrants from various parts of Sudan also came to Khartoum due to severe droughts at the end of the 1980s, due to the long-lasting civil war in South Sudan, which flamed up again at the beginning of the 1990s, and due to the Darfur conflict, which started in 2003 (Njiru/Alba 2004: 32).

Along with accelerated population growth, Greater Khartoum expanded in area. Urban extension was further enhanced by the traditional Sudanese type of housing, which privileges low building densities through huge individual residences with open courtyards (Nègre 2004: 52). Current peripheral settlements extend up to 40 kilometres from the central urban areas (Njiru/Alba 2004: 32). While rapid urban extension and accelerated population growth necessitated an increase in basic urban services, such as transport, health, education, water and electricity, no assertive and straight-forward planning and control mechanisms were in place, and the level of investment in urban services remained low. As a consequence, basic services have been provided only to an inadequate and insufficient extent. In the mid-1990s, Greater Khartoum was therefore pushed into an “urban crisis” (El Sammani et al. 1989: 255; Lavergne 1997a: 49). At the same time, the demand for drinking water in Greater Khartoum further increased due to changing water consumption patterns in the framework of urbanization.

This rising demand for drinking water has entailed huge challenges for the Khartoum governmental water supply system, which is fed by groundwater wells and water treatment stations which extract water from the Nile River. The first two water treatment plants in Khartoum – Burri (1924) and Betelmal (1927) – were built during the British administration. Up to the 1990s, three other treatment plants followed: Old Bahri (1954), which was extended to New Bahri in 1979, Moghran treatment plant (1964), and a small plant to supply Tuti Island (1984). While no treatment plants were established in the 1990s, four new treatment plants – Soba, Gebel Aulia, Shamal Bahri, El Manara – were launched in 2009 and 2010. In addition to the establishment of treatment plants, groundwater wells have been drilled in Khartoum continuously since the British period. The number of new groundwater wells has strongly increased in the past decades and currently amounts to about 100 wells drilled annually.³ This governmentally produced water is transported to the households via governmental water supply networks. A first distribution network was built during the British period in order to supply the governor’s palace in Khartoum and the British quarters east of the palace. The British colonial administration then built other pipe

³ Source: internal KSWC reports in Arabic, 2001 to 2010.

networks to supply the town centres of Khartoum and Omdurman. In some areas, these networks have not been changed up to this day. As an increase in multi-storey buildings also requires higher network pressure which exceeds the capacity of the older networks, large parts of the networks urgently need to be rehabilitated.

In sum, two main conclusions can be drawn with regard to the current governmental water supply system. A first conclusion is that although a rapid increase in demand for water in Greater Khartoum from the end of the 1980s entailed the need to expand governmental water production and distribution, water infrastructure was only built to a very limited extent during the 1980s and 1990s.⁴ Consequently, governmental water supply started to lack far behind the increasing demand (El Sammani et al. (1989: 269). Furthermore, water supply in existing facilities diminished by up to 50 percent in some areas due to continuous siltation and sludge accumulation.⁵ In addition to factors such as institutional weaknesses, skills shortages, bureaucratic procedures, disputed land tenure and distorted political priorities (Njiru/Alba 2004: 32; Simone 1994: 103), the lack of financial means was a major problem for the implementation of water supply projects.

Furthermore, a second conclusion is that although since the last decade, this situation has changed and many new governmental water infrastructure projects have been implemented in recent years, governmental water supply has not succeeded in catching up with the rising demand for water over the past decades.⁶ Consequently, large parts of the inhabitants of Greater Khartoum have not been connected to governmentally provided drinking water, which results in a huge water supply gap. This development is shown in the following chart, which estimates the number of water connections to the central water network in relation to the inhabitants of Greater Khartoum from 1950 to 2010.⁷

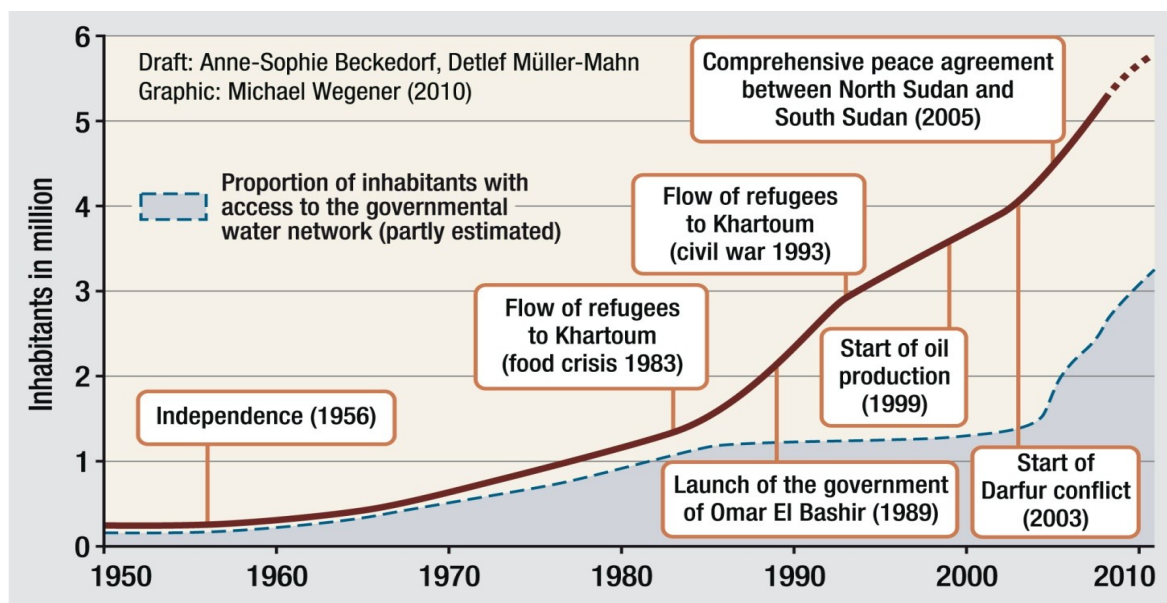
⁴ With regard to Omdurman, for example, one study (EDGE: 7) shows that while the population grew by 32 percent between 1983 and 1993, water supply rose by only 3.7 percent in the same period.

⁵ Interview with GU (1/2/10). In this regard, Simone (1994: 103) deplores that a lot of water infrastructure in Greater Khartoum is not maintained.

⁶ An even more critical situation is reported for sewage. According to Simone (1994: 104), only five percent of the population of Greater Khartoum were connected to a governmental sewage system in 1994. Up to the present day, an estimated amount of more than three quarters of the Greater Khartoum inhabitants are not connected to any sewage system (Pantuliano 2011: 29).

⁷ Source: Denis (2005). Central Bureau of Statistics (2008). Internal KSWC annual reports in Arabic, Khartoum, 2003 to 2010. Müller-Mahn et al. (2010: 38). Interview with PL (23/3/10). Interview with NfP (18/11/09).

Figure 2: The emergence of a water supply gap, 1950 to 2010⁸



One important means to face the gap within Khartoum governmental water supply was the initiation of neoliberal reform programmes, which comprised processes of privatization and commercialization. In the wake of these reform processes, several steps of water management, such as fee collection and water network construction, were outsourced to private companies. In the same vein, commercial principles, such as cost efficiency and income increase, were strongly enhanced. The following section elaborates three main aspects of these trends in greater detail.

Current reform processes: increases in water prices

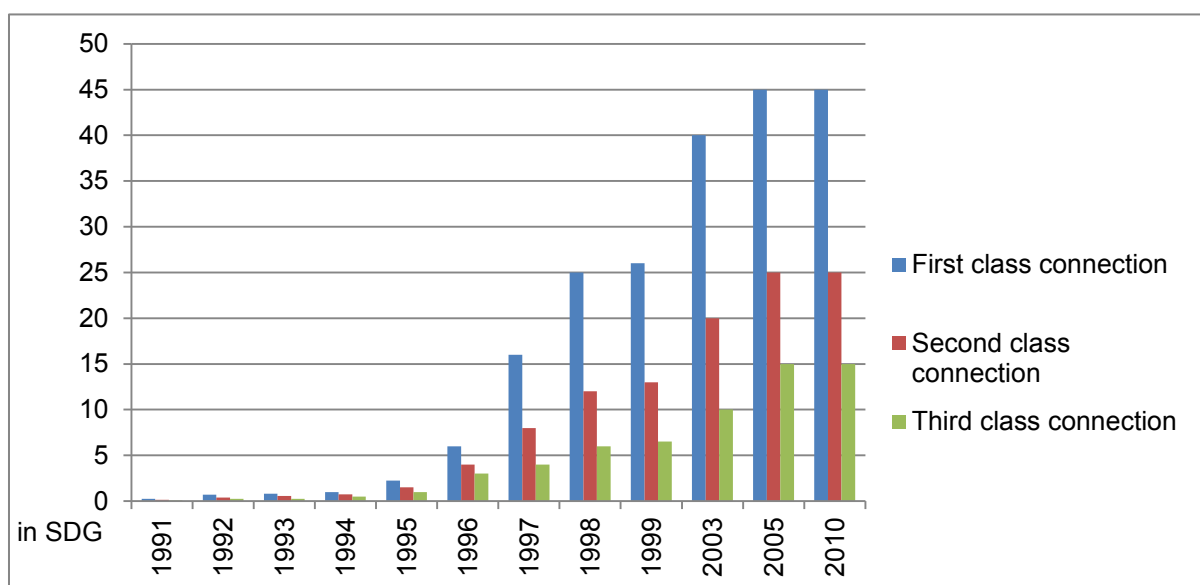
One first aspect is an increase in water prices. Basically, the Khartoum residential water price system is based on a three class residential flatrate system. In this three class flatrate system, the class which a household belongs to is determined by the size of the pipeline which connects the household to the water distribution pipelines. If the diameter of the pipeline to the household is two inches, the household belongs to the first class. If the diameter is one inch, the household belongs to the second class. If the diameter is half an inch, the household belongs to the third class.⁹ The diameter of the pipeline to the household partly determines the amount of water which enters the household. The smaller the diameter is, the less water can flow into the household due to the very low pressure in the water supply network. While the first class mainly comprises multi-storey buildings with huge gardens, second and third class houses are usually much smaller. Furthermore, while first and second class houses are furnished with a siphon for sewage water, houses in the third class usually do not have siphons (Shora Consultancy 2006: III.5). In addition to the

⁸ Source: Müller-Mahn et al. (2010: 38).

⁹ Interview with PL (23/2/09); Interview with Kp (28/3/09); Interview with Abl (1/11/09).

residential three class flatrate water price system, commercial and industrial water consumers, such as restaurants, hotels, bakeries, shops or factories, are priced by a commercial flatrate. Like the first residential class, these consumers are furnished with a two inch connection. Currently, the commercial flatrate amounts to 95 SDG per month in comparison to the residential flatrate, which amounts to 45 SDG (first class), 25 SDG (second class) and 15 SDG (third class) per month.¹⁰ The following chart shows the development of these residential flatrate prices and highlights two main price increases: first, prices increased by more than ten times from 1995 to 1998, and secondly, prices almost doubled from 1999 to 2005.¹¹

Figure 3: Development of residential water prices in Khartoum, 1991 to 2010



While the first big water price increase from 1995 to 1998 was mainly due to the enormous inflation in Sudan in the mid-1990s, the second price increase from 1999 to 2005 resulted from the attempt to increase KSWC income in the course of privatization and commercialization. While attempts have been made in recent years to reclassify houses into higher flatrate tariffs – several huge multi-storey buildings with apartments, gardens and swimming-pools, were thus reclassified from a monthly first class residential flatrate (45 SDG per month) to a commercial flatrate (95 SDG) – no general water price increase has despite several attempts been implemented since 2005. Besides political reasons, which include for example the fear of potential public unrest and vote catching in the wake of upcoming elections, one important reason why no water price increases have been implemented in the last seven years is based on ethical considerations. Several KSWC employees thus consider an

¹⁰ One SDG (Sudanese pound) corresponds to about 0,30 Euro.

¹¹ Source: KSWC internal data. Interview with GU (1/2/10). Up to 1999, the prices were in Sudanese Lira and up to 2007 in Sudanese Dinar. All prices have been converted to SDG.

increase in water prices as a crime against those water consumers who will then have difficulties to pay higher water prices. These concerns have particularly been raised since the last water price increase in 2005, which had already been strongly contested. Following the perspective that “water is life” and that water should therefore be provided to anybody regardless of economic aspects or financial constraints, several KSWC employees rejected any increases in water prices as they considered water supply as their moral obligation. As increases in water prices were not compatible with their value systems, attempts to increase water prices were rejected. Furthermore, the fact that if water consumption is taken into account, third class water consumers pay relatively more than first class water consumers further intensifies the rejection of water price increases for the third class.¹²

Current reform processes: increases in water cuts

In addition to increases in water prices, a second aspect of current neoliberal reform processes are increases in water cuts in case of unpaid water bills. According to the 2002 KSWC Law, KSWC has the right to disconnect consumers’ water supply if they do not pay their bills.¹³ Equally, the 2010 PWC Water and Sanitation Policy (PWC 2010: 14) considers water cuts as a tool to make sure that water bills are paid and specifies:

“Defaulters in bill payments, including government agencies, shall be penalized and if failure to pay persists, the connection shall be cut according to the contractual agreement.”

Consequently, some KSWC employees try to implement water cuts in order to force water consumers to pay their water bills in full and without delay. As a KSWC employee explains:

BN: “Now I am cutting the water for Khartoum University. I just cut it. Then they came directly into my office. The university president and many people from security. But I am not afraid of any of them. I talk with them directly. And I say you have to pay money for the water. And they say they do not have it. And somebody from KSWC who was a friend or relative of the university president made a suggestion to pay 40.000 SDG. But I want them to pay 80.000 SDG. (...) They say that their university is poor and the registration fees are low. But I told them this is not my problem. They can go to the government and ask them to pay the money for them if they do not have it. So they say they will bring the cheque. And when we have it, we will open the water for them again.” (30/9/10)

While in the wake of growing commercial pressure to increase fee collection, KSWC thus started to actually implement water cuts, these water cuts however remain

¹² In more detail, calculations carried out at KSWC in 2008 show that while the average consumption of first class households is about 580 litres per person per day, it is 256 litres per person per day in the second class and only 65 litres per person per day in the third class. Interview with Bm (21/2/10). Interview with Kp (14/2/10). Consequently, while households with first class water connections pay three times more than the third class, they consume almost nine times more water on average.

¹³ 2002 KSWC Law, article 32.

particularly sensitive and highly contested. As in the case of water price increases, the essentiality of water for life entails moral obligations which strongly impede the implementation of water cuts on a large scale. As the former Sudanese Minister of Finance, the former Sudanese Minister of Irrigation and Water Resources and a senior KSWC employee note:

BI (11:58): “There is a lot of social coercion in this water sector. This is not objective management.” (8/2/10)

BTi (43:14): “You cannot cut water. Any good you can stop it, if you are not given the money you are looking for. But for water, you cannot stop water from people.” (1/11/09)

NpB: “If you visit one house in Khartoum, and you ask for a glass of water, and the owner says he does not have, and you ask why, and he says because KSWC cut our water. You will come back to us [KSWC]. And you will be very angry and tell us, this is forbidden. (...) If you do not drink water for three days only, you will die. (...)

So if you come and say to me you cannot pay it, I can never cut the water from you. Water comes from God. It is essential. In Islam, it is haram¹⁴ if somebody asks you for water and you do not give him. If you have water, you have to supply to anybody.” (2/3/10)

Similarly, the following interview with a KSWC employee demonstrates how KSWC employees are themselves torn between trends to enforce payment of water bills in the framework of growing commercialization and between moral obligations which prohibit deliberate water cuts, particularly in residential areas. This inner conflict results in contradictory attitudes which impede any clear and coherent implementation of water cuts. Consequently, despite commercial pressure and legal bases, water cuts in case of unpaid water bills are exceptional in Greater Khartoum up to the present day.

BN (27.05): “If the customer does not pay for two months or three months, we make a stamp into the bill and say that within 48 hours you have to pay or we cut the water.” (...)

I: “And does this happen? That the water is cut?” (...)

BN: “Yes. If the water is not paid, we can maybe cut it. For some hours or for one day. But often, we cannot make it. (...) KSWC cannot use water cuts easily.”

I: “So do you cut water if the people do not pay or do you not cut water?”

BN: “Yes, we cut it. (pause) Sometimes. But very few. Very very few. Really, it is a rough way to treat with the people. You see it is haram. So you should not cut it. You cannot cut the water, really.” (17/3/10)

Current reform processes: installations of prepaid water meters

In addition to increases in water prices and water cuts, a third aspect of recent neoliberal reform processes is the installation of prepaid water meters. Similar to water cuts, prepaid water meters are based on the water consumers' responsibility to

¹⁴ Haram: Arabic expression for “forbidden” in a religious sense.

pay for water. In contrast to water cuts which assign the responsibility for enforcing payment of unpaid water bills to KSWC, prepaid water meters transfer the responsibility for paying water bills in advance to the water consumer, and thus aim at preventing unpaid water bills in the first place. The enhancement of prepaid water meters is in line with general endeavours to reintroduce metering, which to this day covers only small parts of commercial water consumption. The 2002 KSWC Law determines that KSWC is solely responsible for the installation and operation of water meters.¹⁵ Where regular water meters are in place, one cubic metre of water is sold at a price between one SDG and two SDG per cubic metre, depending on the level of water consumption and on the agreement with the customer. Factories with particularly high water consumption, such as Pepsi Cola, pay up to four SDG per cubic metre. From the perspective of KSWC, prepaid meters have been increasingly installed in recent years because they are considered as an efficient, economic, equitable and objective means to increase the collection of water fees and to get rid of special agreements and exemptions. In 2005/2006, KSWC ordered about 10.000 prepaid water meters worth more than two million USD from a British water company. More than one third of these prepaid water meters were then installed in various commercial and governmental buildings in Greater Khartoum where the daily water consumption exceeded 2000 litres. A second tender for prepaid water meters was issued in 2009/2010 and resulted in another order for 10.000 prepaid water meters in the amount of two million Euro from a Turkish company.¹⁶

While these prepaid meters are intended to further extend the use of prepaid meters for commercial and governmental water consumption, the installation of prepaid water meters in residential areas remains a highly sensitive issue and has not been carried out up to the present day. Similar to the problematic implementation of water price increases and of water cuts in case of unpaid bills, the potential installation of prepaid water meters in residential areas clashes with moral considerations which are ingrained in the value system of both KSWC employees and water consumers in Khartoum. The following extract from a newspaper article, for example, describes the reaction of an inhabitant of Greater Khartoum when asked about prepaid water meters, and makes clear that prepaid water meters are generally rejected by many Khartoum inhabitants.¹⁷

“Leyla Abdalla, citizen, wonders about how she could deal with a prepaid system. (...) She says: I can reduce electricity consumption. But water consumption, I cannot reduce it. If I have no money, I will not buy electricity. But I need to buy water. If the money from the prepaid water meter finishes, what shall I do? It is impossible to apply the prepaid meter system. Everybody says this.”

¹⁵ 2002 KSWC Law, article 32.

¹⁶ Newspaper Sahafa (18/3/09); newspaper El Ayam (29/7/08). Interview with Ib (24/3/10).

¹⁷ Newspaper Elsudani (28/10/09).

Against this background, KSWC is very keen to constantly emphasize that prepaid water meters are not going to be extended to residential areas.¹⁸ One KSWC employee thus notes:

BN (38:20): "It is very difficult to install prepaid in residential areas. If somebody cannot pay in advance. How can you refuse to give him water? People would never accept prepaid water meters. They would damage the meters. If we want to install prepaid in residential houses, we have to convince people before. But at the moment, this is impossible." (17/3/10)

Conclusion: the role of moral values

In sum, the examples of increases in water prices, increases in water cuts in case of unpaid water bills and installations of prepaid water meters demonstrate that current reform processes within Khartoum governmental water management which are based on economic principles clash with existing value systems in place. These examples have thus shown that as water is particularly essential for life, moral considerations with regard to water supply supersede in some cases the economic principles of current neoliberal reform programmes. Consequently, no further increases in water prices have been implemented in recent years; no water cuts in case of unpaid water bills are implemented at large scale; and no prepaid water meters are installed in residential areas.

One conclusion from these empirical findings is that besides other political factors which have not been further addressed in this contribution, moral factors strongly shape the governance of water in Khartoum. The moral values of both employees in water management and water consumers thus contribute to impede water price increases, water cuts in case of unpaid water bills and prepaid water meters for household consumption. One key aspect in this regard is that "water is life", which is a very common statement at KSWC. Due to water's essentiality and unique physical characteristics, water price increases, water cuts and prepaid water meters are socially and morally difficult to accept for water consumers and for KSWC employees, who are torn between moral obligations to supply water and economic constraints. It follows that value systems are one important factor which contests, overrules, modifies and rearranges the logics of commercialization. This finding also demonstrates that rather than constituting an independent entity based on economic reasoning, neoliberal reforms within Khartoum governmental water management are inherently embedded in social relations and comprise a complex amalgam in which moral dimensions play a major role. This complexity results in contradictory attitudes, discourses and policies, which impede any reform process based on purely commercial principles.

¹⁸ Newspaper El Ayam (29/7/08). Newspaper El Wasat (3/9/09). Newspaper Sahafa (18/3/09). Newspaper Elsudani (28/10/09).

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