Juba Public Toilets Survey

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Sustainable Water and Sanitation in Africa

Juba Public Toilets Survey

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Acronyms

CPA	Comprehensive Peace Agreement
GPS	Global Positioning System
GIZ	German Technical Assistance program
JICA	Japan International Cooperation Agency
MDTF	Multi- Donor Trust Fund
NBS	National Bureau of Statistics
RSS	Republic of South Sudan
SISP	Sudan Infrastructure Services Project
SUWASA	Sustainable Water and Sanitation in Africa Program
UN	United Nations
USA	United States of America
USAID	United States Agency for International Development

Executive Summary

The rapid growth of Juba City, the capital of South Sudan, over the past ten years presents municipal authorities with a multitude of challenges. One of these challenges is the provision of adequate sanitation facilities for an ever growing population. Presently, information that would ordinarily be available for planning purposes, including the operation and viability of public toilets is scarce or absent. As a result, there is a risk that future investments, based upon circumstantial evidence, will not target those areas of the city that should be prioritized. The provision of accurate data regarding current sanitation conditions at both household and city level is a priority for the Government of South Sudan as it looks to make new investments in the city.

USAID through its Sustainable Water and Sanitation in Africa (SUWASA) project supported the water and sanitation sector of South Sudan and worked with the Juba City Council to plan and prioritize sanitation investments across the city. To fill the current information gaps on the sanitation situation in Juba, SUWASA developed and undertook a survey of public toilets which was conducted by local enumerators in December 2013.

Through a collaborative process, the USAID/South Sudan Mission representative and the SUWASA team in Juba determined the content of the survey prior to field testing and deployment. The survey questionnaire contained several components aimed at understanding operations of public toilets to determine functionality and areas for improvement, replication and scale up.

Four enumerators that had previously worked on the Juba Household Sanitation Survey conducted the Public Toilet Survey from December 10 -11, 2013 using paper based questionnaires and the Tt-ARD electronic Project Observation Reporting and Tracking (ePORT) approach running on mobile devices to pick the geographic locations of the toilets. The enumerators were trained by the survey management team and worked in pairs (1 male and 1 female).

The survey generated 21 individual points of data. All survey points were geo-referenced and used to create a series of initial map outputs (Appendix D). The Tetra tech home team undertook the analysis of all geographic information whilst the SUWASA project staff in Juba undertook a quantitative analysis of the survey data for presentation to local authorities and USAID.

The survey has produced hitherto unknown information, key of which are the following:

(i) Uneven Spread of Public Toilets across Juba City: Public toilets seem to be concentrated in the two Blocks of Munuki and Kator and very few in Juba. Future location of public toilets needs to take this into consideration to ensure equity and coverage of all segments of the city.

(ii) Private Sector Involvement is High and should be Maintained: Even though the biggest toilets are constructed by the donors and the public sector, majority have been financed and built by the private sector with a steady increase between 2008 and 2013. Management of the public toilets is largely by the private sector with only one toilet (one of the the bigger toilets) being managed by the public sector. The toilets seem to be profitable with an average profit of US$541 per

month for each toilet with an average number of 10 units. The role of the private sector should be safeguarded and encouraged to continue leveraging resources to the subsector.

(iii) Regulation is Rrequired: There is a clear need for the public sector through the city council to improve the regulatory environment including hygiene practices, use of protective clothing, lighting, privacy, security and general upkeep of the toilets.

1.0 Introduction

1.1 Background

Following the conclusion of the 2005 Comprehensive Peace Agreement (CPA) interim period and independence for South Sudan in July 2011, the Republic of South Sudan (RSS) continues to face new challenges as it continues to promote peace, development and stability. Since the signing of the CPA, the Government of South Sudan has progressed, but continues to struggle to meet increasing demand for basic services and to develop a broad economic base beyond the extractive industries. USAID and other development partners have proactively engaged in helping South Sudan meet the challenges of maintaining stability and supporting development while upholding the governance capacity development.

Shortly after the CPA in 2006, South Sudan suffered from significant cholera outbreaks across the country which left more than a thousand people dead. The outbreaks often centered on areas with relatively high population densities such as (peri-) urban and military barracks. At that time the population of the new capital, Juba largely consumed untreated Nile River water and the urban sanitation coverage was estimated to be below 10 percent, resulting in high mortality rates from water-borne diseases. During this time of emergency, USAID and other development partners invested in emergency responses to the sanitation disaster.

By 2009, it was estimated that urban sanitation coverage in South Sudan had increased to approximately 19 percent (WSP 2010). However, urban areas such as Juba continue to rapidly expand, whilst basic services such as sanitation have not kept up with this rapid growth. The exact population numbers for Juba remain contested, but in 2005 the population was estimated to be 163,000, whilst the current population of Juba is estimated to be approximately 500,000.

Despite the significant challenges surrounding urban sanitation, only limited government or donor investments have been made in urban sanitation due to many competing priorities. The main investment that has been made was by the World Bank managed Multi-Donor Trust Fund (MDTF) which invested in the construction of a wastewater lagoon for discharging septic exhauster trucks on the periphery of Juba. At the same time, the private sector has stepped in to provide exhauster services throughout the city. At the household level, a survey undertaken by SUWASA in October 2013 revealed that about 40 percent of households

Figure 1: Public Toilet Block in Juba

have invested in toilets that can be emptied by a vacuum tanker.

Additionally, Juba has a significant number of public toilets although it is not clear what the exact number is (Figure 1). The first five public toilets were constructed with funding from USAID through the Sudan Infrastructure Services Project and another three were funded through the Multi-Donor Trust Fund managed by the World Bank.

Given the low level of access to household latrines, there is general agreement in the sector that public toilets will remain a key part of the sanitation solution in Juba for some time to come. Public toilets are also necessary for places like bus stops, markets etc., where large numbers of people congregate. It is therefore important to get a better understanding of how these public toilets in Juba are operating as a means of providing lessons for future replication and scale up.

1.2 Juba Public Toilets Survey

It is against this backdrop that the Sustainable Water and Sanitation in Africa (SUWASA) program undertook this survey of public toilets. The broad objective of the survey was to review operations of public toilets to determine functionality and areas for improvement, replication and scale up.

Through a collaborative process involving the Juba County, Juba City Council and USAID, SUWASA refined the survey objective, into actionable research questions as follows:

- Where are the toilets located, and what populations are they serving?
- How are the toilets constructed and what municipal services are they connected to?
- How are the toilets operating from a business and service provision point of view?
- What lessons can be drawn from these toilets for future replication and scale up of public toilets in Juba?

This report presents the results of the survey highlighting current operations of public toilets including their construction, usage, management and profitability. The report ends with recommendations on possible areas of improvement. The study is one of five studies undertaken by SUWASA in order to understand the sanitation situation in Juba fully. The other four studies include:

- A survey of private exhauster businesses to determine operations and regulatory environment;
- An assessment of the Roton Wastewater Lagoon to determine functionality and areas for improvement.
- A Sanitation Mapping and Household Survey to determine sanitation and hygiene practices;
- Mapping of institutions involved in sanitation to determine operational effectiveness.

The outcomes of this and all the other reports feed into the Juba City Sanitation Investment Plan.

The rest of the report is organized into four chapters:

- Chapter two presents the methodology used for surveying public toilets;
- Chapter three presents the findings of the Public Toilets Survey highlighting construction and operations;
- Chapter four draws some conclusions and discusses on the implications of the findings for possible donor and government interventions; and
- Chapter five presents some key lessons learnt from this survey.

2.0 Survey Methodology

2.1 Introduction

Due to the limited number of toilets in Juba City and lack of information on the exact number, the research team decided to survey all toilets built by both the public and private sector that could be identified in the three Blocks of Juba, Munuki and Kator. The team worked with Block authorities and data enumerators to identify all toilets in the three Blocks. The enumerators were escorted every morning by staff from the Juba City Council to locate the toilets and also ensure compliance from the respondents. A total of 21 public toilets were visited and 21 persons interviewed using a predesigned questionnaire. The target respondents were either owners of the toilet block (the person or representative of the company that had paid for construction of the toilet block and who therefore owned the toilet block) or employees managing the toilet block. In some cases, two or more visits were made to ensure that the enumerators met these target respondents. The survey was undertaken on December 9-13, 2013.

2.2 Public Toilet Survey Design

2.2.1 Definition of Research Questions

As stated in the introduction, the broad objective of the Public Toilets Survey was to understand the operations of public toilets in Juba and identify areas for improvement. The key research questions were:

1. Where are the toilets located, and what populations are they serving?
2. How are the toilets constructed and what municipal services are they connected to?
3. How are the toilets operating from a business and service provision point of view?
4. What lessons can be drawn from these toilets for future replication and scale up of public toilets in Juba?

2.2.2 Finalization of Public Toilets Survey Content

Using the research questions as a guide, the survey design team worked through a careful question selection process. A draft questionnaire was prepared by SUWASA. The team selected key questions for the survey to ensure that only useful data is collected. The purpose of this rigorous review was to pare down the questionnaire to its essential elements, thus limiting respondent fatigue and improving data quality. The resulting survey was structured based on five components (see Appendix A for the complete questionnaire):

- General respondent demographic information including informed consent;
- Information about the toilet facility;
- Connection of the toilet to municipal services including water, electricity and sewerage;
- Operations of the toilet block;
- Construction of the toilet block.

After receiving feedback from enumerators and a number of field tests, some questions were added and others were dropped. The survey also involved a physical observation of different aspects of the toilets by the enumerators. The survey was completed with a focus group discussion with builders to understand the construction of septic tanks in the toilets.

2.3 Enumeration: Training and Implementation

Upon completion of the survey design process, the survey management team conducted enumerator training before deploying enumeration teams to conduct the interviews.

2.3.1 Enumerator Selection and Training

SUWASA staff identified four enumerators (2 males and 2 females) who had previously worked on the Juba Household Sanitation Survey and therefore had developed a good basic understanding of the SUWASA sanitation agenda. The training involved helping the enumerators to understand the intention of each question including translating into Arabic to ensure correct interpretations in the field. The training, on December 2-6, 2013 included the following components:

- Introduction to the SUWASA project;
- Familiarization with the survey objectives;
- Introduction to survey content using paper forms;
- Basic skills in communications and people skills; and
- Group practice in pairs.

The enumerators worked in pairs to ensure accuracy of data collected and also to ensure security.

2.4 Data Transfer and Progress Monitoring

The survey management team seamlessly transferred interview data collected by enumeration teams from the paper based questionnaires to excel based spreadsheets. Since the sample was small, the team entered all the data into excel after completion of the survey. The total sample size for analysis comprised 21 interviews.

3.0 Findings of the Public Toilets Survey

3.1 Demographic Information

A total of 21 public toilets were visited and one employee was interviewed at each toilet. All respondents were young males with an average age of 29 and almost all were South Sudanese. This could be a reflection of the fact that public toilets are very 'public' and therefore not considered ideal for women to work. The majority of respondents were cashiers/cleaners, although there was also a good number of managers/ directors (Table 1).

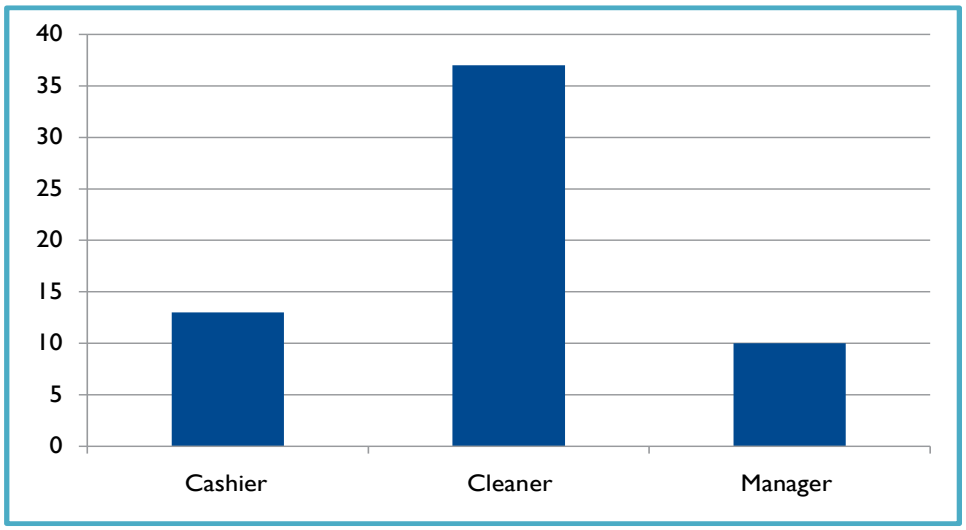
Table 1: Position of Respondent at the Toilet

Position	No.
Owner	2
Director	1
Manager	7
Assistant Manager	1
Cashier/Cleaner	10
Total	21

3.1.1 Staffing at Public Toilets

In total, 60 staff was reported to be employed in the 21 toilets, majority of who were cleaners (Figure 2).

Figure 2: Staffing at Public Toilets



It is clear from the figures above that there is an understanding that the toilets are supposed to be kept clean. The survey found that in over half of the cases, the cleaners also doubled as cashiers. At the same time, over half of the toilets had a dedicated cashier. This shows that the function of collecting revenue and by implication the idea that the public toilets are income generating ventures is taken seriously.

3.2 Location of Public Toilets

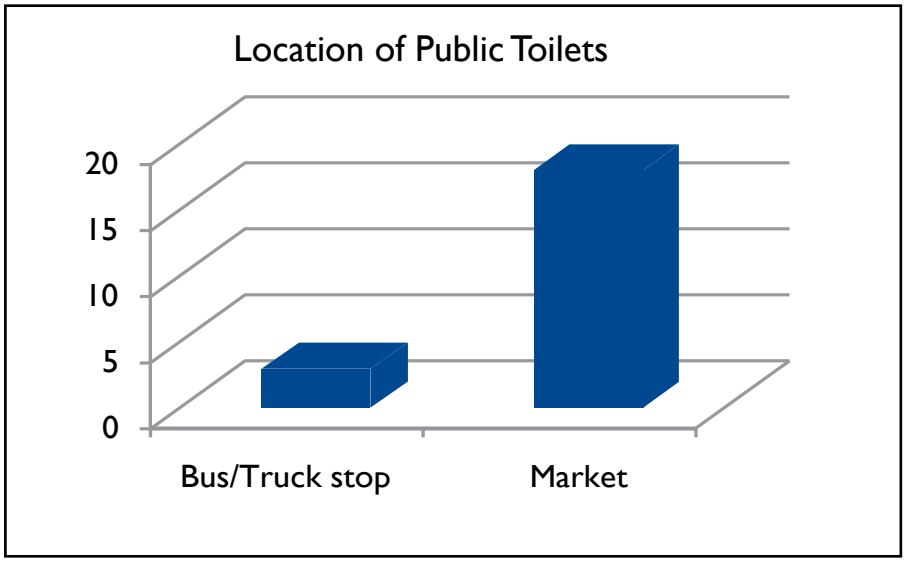
Table 2 shows the location of the public toilets that were surveyed.

Table 2: Public Toilets Surveyed by Block and Location

Payam	Location		Total
	Bus Stop	Market	
Kator	0	8	8
Munuki	3	7	10
Juba	0	3	3
TOTAL	3	18	21

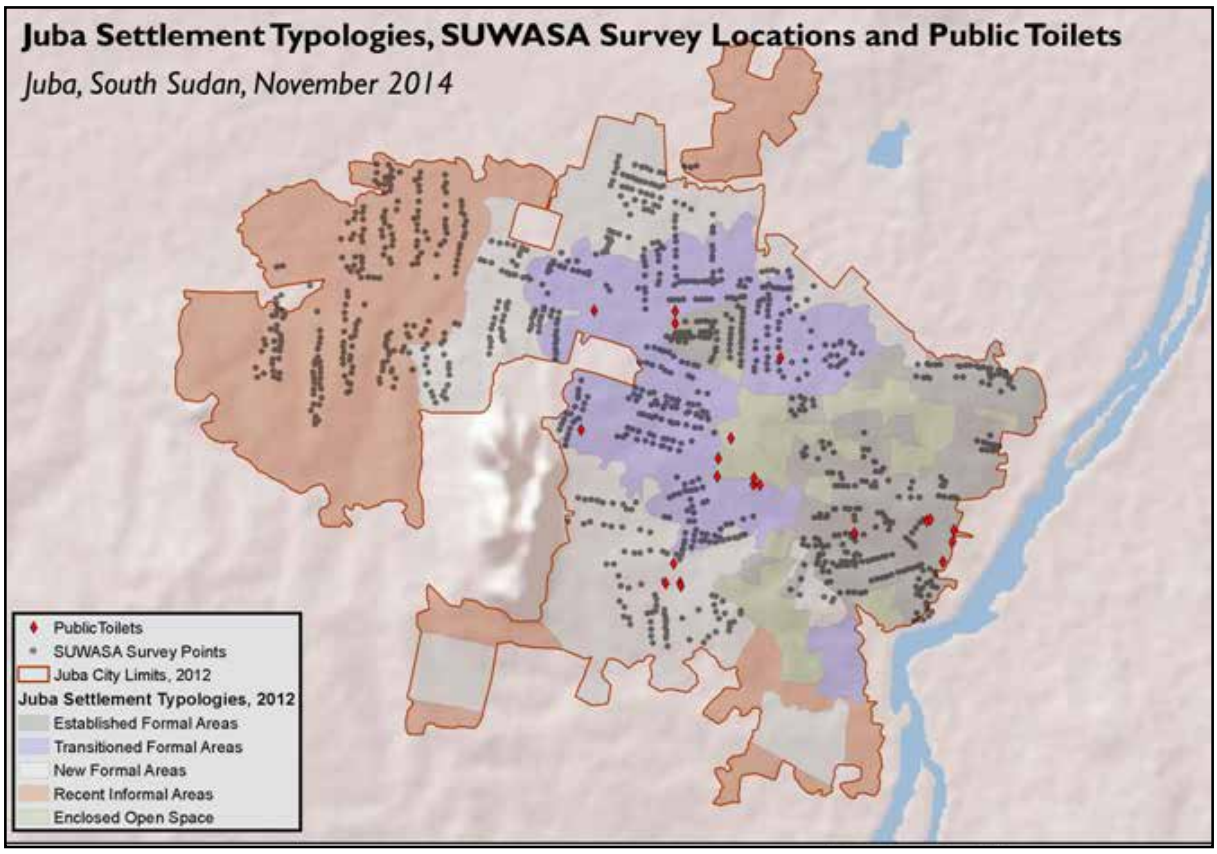
As the table shows, the majority of public toilets are located at markets, although some of the biggest toilets are at bus stops (Figure 3).

Figure 3: Location of Public Toilets



It should be noted that some bus stops are contiguous to the markets and could therefore be serving both. Interestingly, Munuki Block has the largest number of public toilets whilst Juba Block has the least (Figure 4).

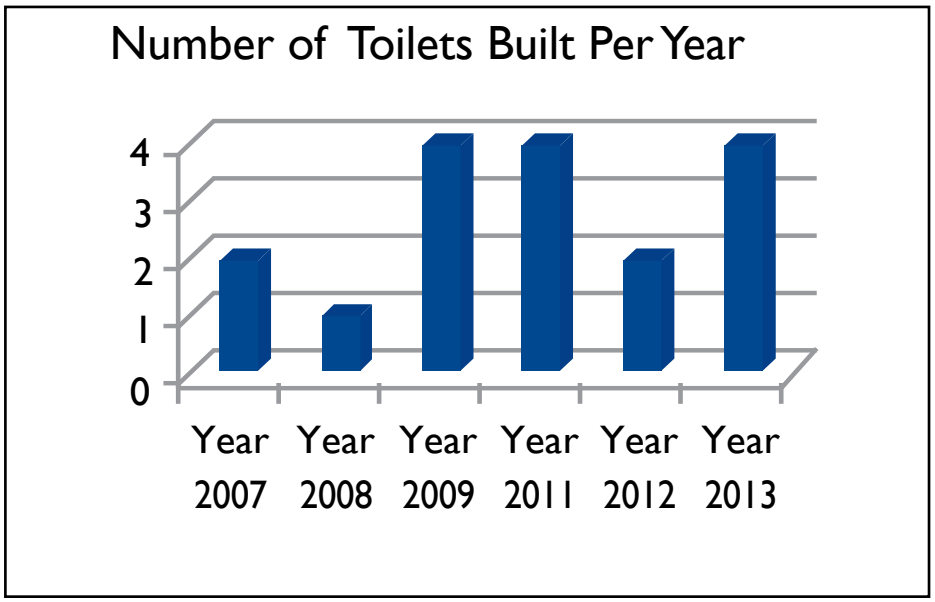
Figure 4: Location of Public Toilets Surveyed in Juba



3.3 Steady Increase in Number of Toilets:

The survey found that there has been a steady increase in construction of public toilets between 2007 and 2013 as shown in Figure 5 below.

Figure 5: Number of Public Toilets Built Per Year



3.4 Financing of Public Toilet Construction

The majority of the public toilets are financed by private individuals and companies, although the biggest toilets are financed by donors and government (Figure 6 and Figure 7).

Figure 6: Sources of Financing for Public Toilets

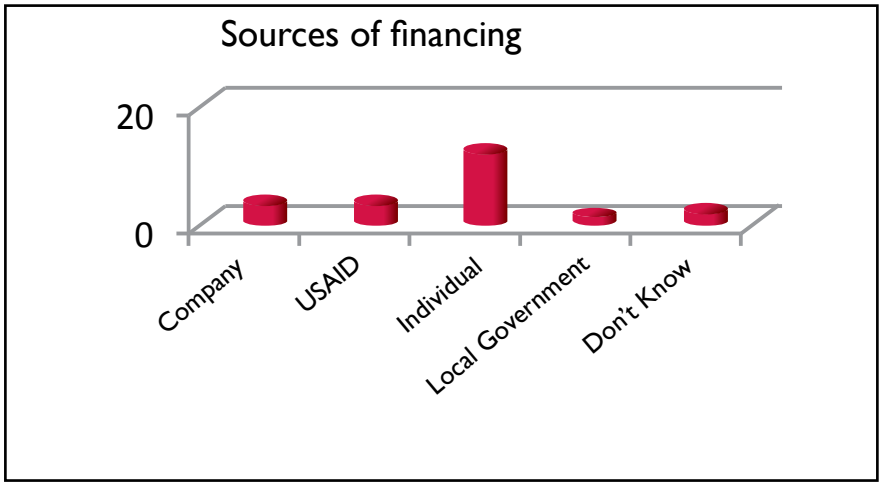
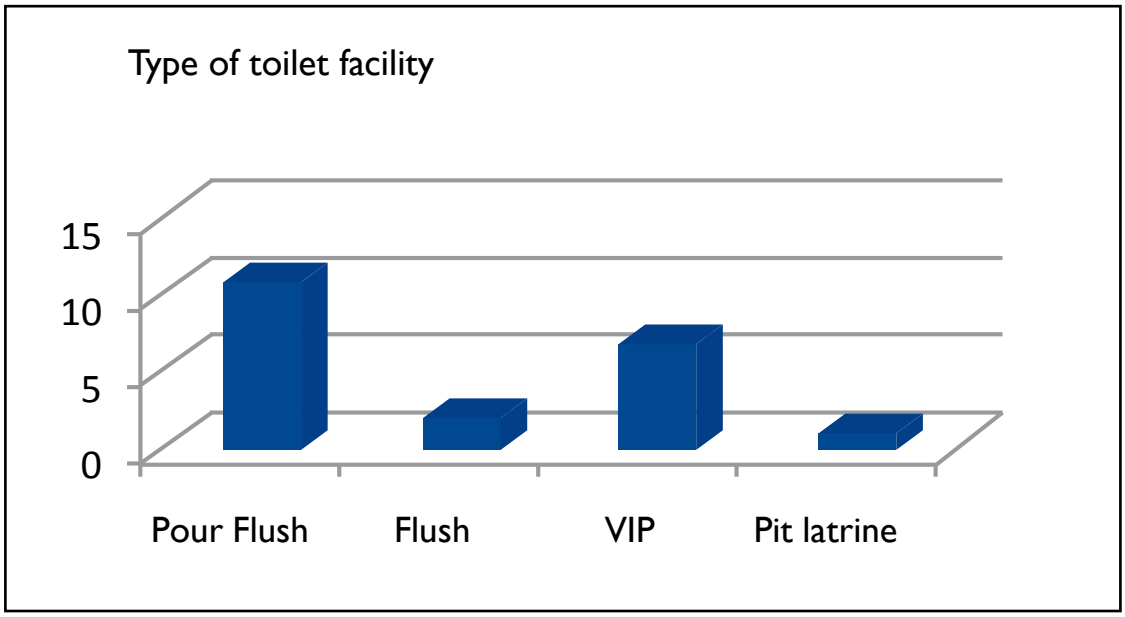


Figure 7: Registered Toilet Run by Private Sector

3.5 Public Latrine Technology

The majority of the toilets are pour flush, although there are also ventilated improved pit (VIP) latrines, flushing toilets and pit latrines (Figure 8).

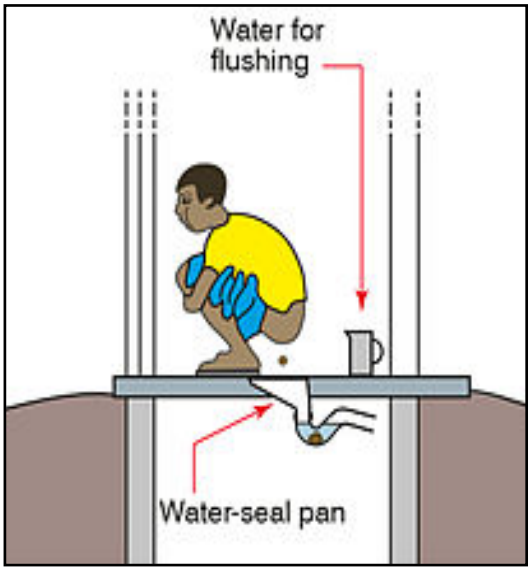
Figure 8: Type of Toilet Facility



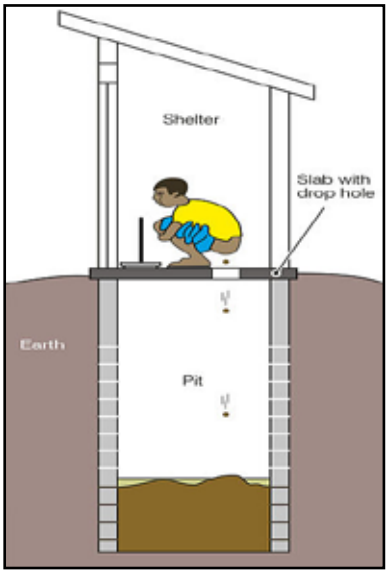
The major difference between the pour flush and the pit latrine type toilet is that the former is designed with a water seal (U-trap or siphon) used over one or two offset pits and water has to be poured in the toilet pan after each use. The latter only has a plain hole or seat and does not require use of water (See Figure 9).

Figure 9: Typical Pour Flush and Pit Latrine Arrangements

Typical Lined Pit Latrine



Typical Pour-flush Pit latrine



Most of the pour flush toilets reported having a septic tank and substructures that are lined with concrete. It is however worth noting that this technology is generally poorly designed as shown in Figure 10.

Figure 10: Manholes inside Public Toilet Building

The location of the manholes inside the toilet increases odor within the building and also means that in the event of a blockage, the place would be very unhygienic.

Also key to note are the toilets constructed with conservancy tanks without soakaways, instead of the proper septic tanks.

Almost all public toilets in Juba use squat pans to allow for anal cleansing with water (Figure 11).

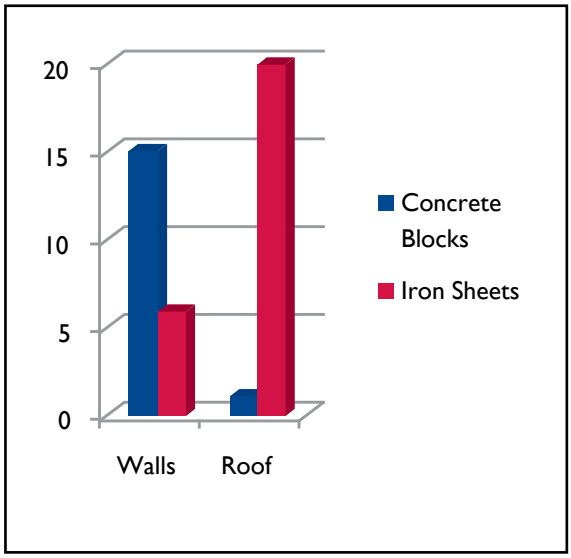
Figure 11: Typical Ceramic and Concrete Screed Floors with Squat Pan

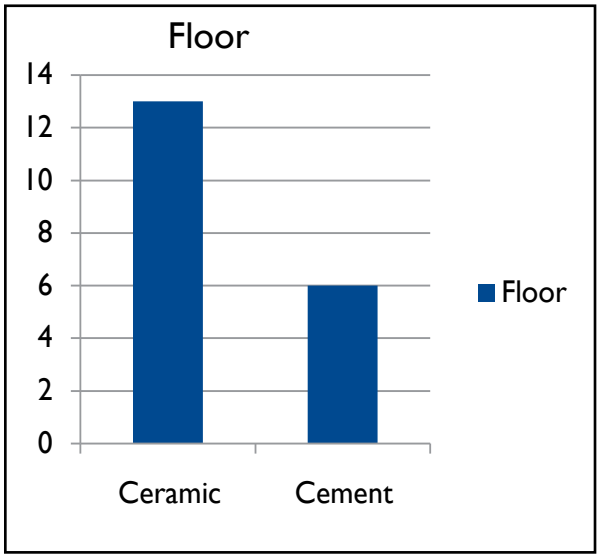
3.6 Toilet Buildings

Most toilets are built of concrete walls although some of the private ones are made from iron sheets (Figure 12). Almost all roofs are iron roofing sheets. The floors of the toilets are either ceramic tiles or cement screed whilst ventilation is largely by airbricks/ air vents although some of the larger toilets have windows (Figure13 and Figure 14).

Figure 12: Public Toilet Constructed of Iron Sheets

Figure 13: Construction Materials for Public Toilets





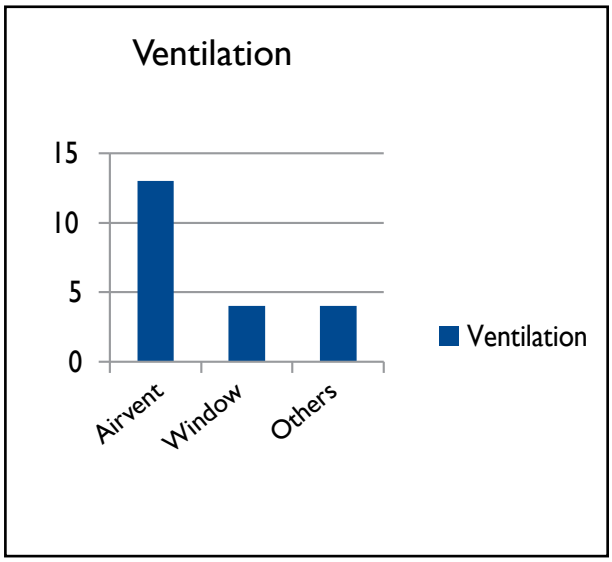


Figure 14: Toilets with Windows for Ventilation

3.7 Ablution Facilities

On average, the toilet blocks had 10 toilet units (7 for men and 5 for women). The average number of shower rooms was seven (Table 3).

Table 3: Ablution Facilities in Public Toilets in Juba

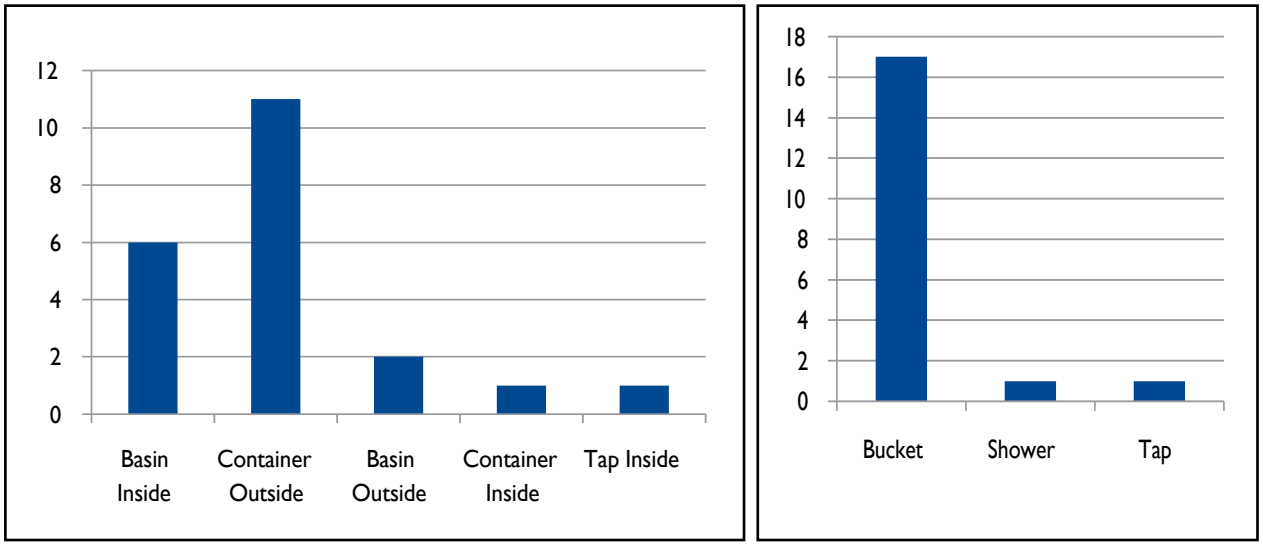
	Shower rooms (#)	Toilet Units (#)	Toilet units-men (#)	Toilet units-women (#)
Total	142	218	89	65
Average	7	10	7	5
Max	18	30	16	14
Min	0	1	1	1

Bathing facilities are provided in almost all the toilets, but mainly in the form of buckets (Figure 15).

Figure 15: Buckets for Showering

Hand washing facilities are provided in almost all the toilets but were mainly containers outside the toilet building (Figure 16).

Figure 16: Bathing and Hand washing Facilities in Public Toilets



3.8 USAGE of Public TOILETS

Several case studies in developing countries indicate a usage range of eight to 30 households per public toilet. For this study, a level of service of one toilet per eight households has been adopted as it is on the lower end. Based on an average household occupancy rate of 9.36 persons per household the per capita level of service is 75 persons per toilet. This means that the 21 public toilets in Juba are serving about 8,625 persons daily.

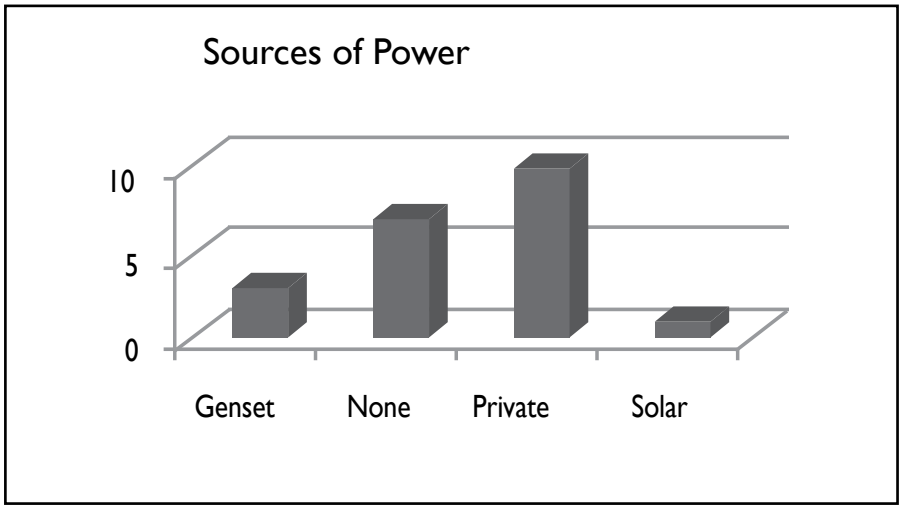
It should be noted that even though it was not possible to assess the exact number of men and women using the public toilets, all respondents consistently reported a higher usage by men than women especially for the bathing facilities. This was observed through observation of two toilets by the data enumerators.

3.9 Connection to Municipal Services

Power Supply

Most toilets obtain their power from private power suppliers, mostly private generators (Figure 17).

Figure 17: Sources of Power



On average, toilets reported running power for 8.8 hours in the evenings only.

Water Supply

Almost all the toilets have a water storage tank as they all obtain water from private tankers (Figure 18). The average size of the storage tanks is 3,488 liters, the minimum 400 litres and the maximum 25000 litres.

Figure 18: Typical Water Tank at Public Toilet

3.10 Privacy and Security

Out of the total 21 toilets surveyed, only one was built with two separate blocks (one for men and one for women); eight of the toilets had no separation between men and women (any one could use any toilet) and only half (10) had a wall separating the women from the men. Separation in the remaining two was by way of allocation of units in the block to either men or women (Table 4).

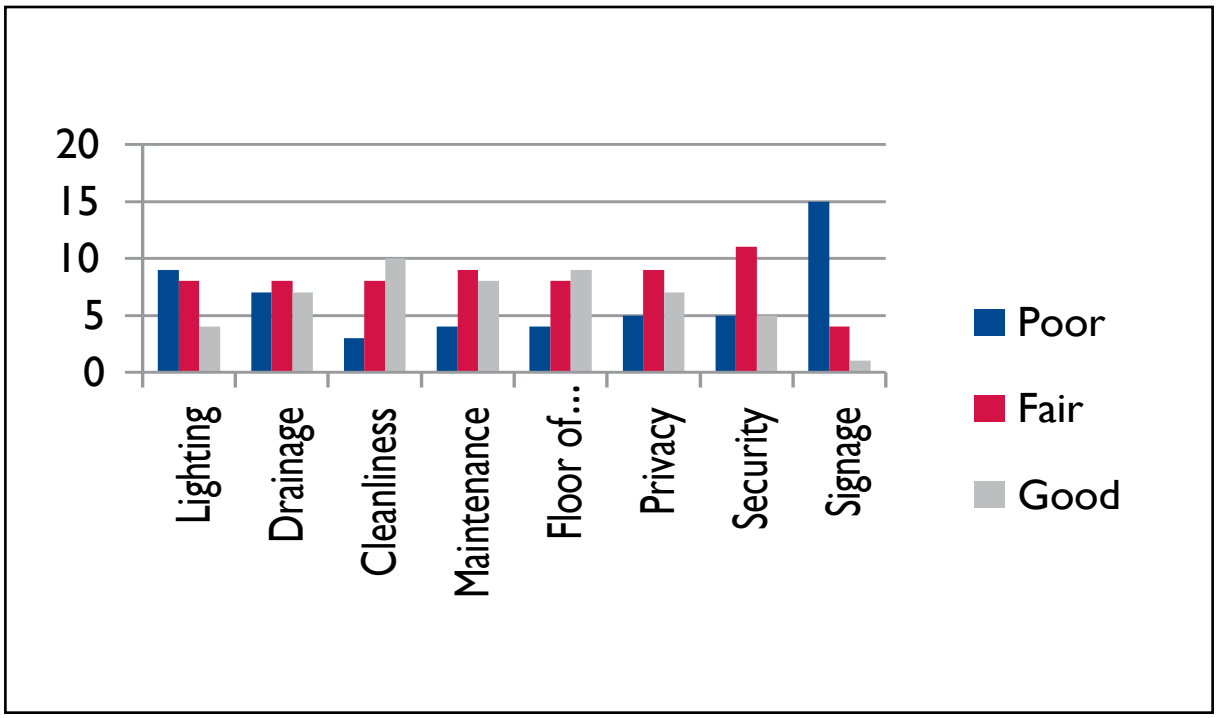
Table 4: Separation of Toilets between Male and Female

Form of Separation between men and women	Number of Toilet Blocks
Different Blocks	1
Walls	10
Doors	2
No Separation	8

3.11 General Maintenance of Toilets

Figure 19 shows conclusions on the general maintenance and state of repair of the toilets, based on physical observation by the data enumerators.

Figure 19: General Level of Maintenance of Public Toilets



As the figure shows, cleanliness and the state of the shower floors had the best ranking in terms of progressing from poor to good. Maintenance was similar. Signage was the worst performance indicator, followed by lighting. The rankings for drainage and security were mixed. In general all indicators are fair or average meaning there is room for improvement in all aspects of general maintenance (see Figure 20).

Figure 20: Poor Drainage at a Public Toilet

It should be noted that the above conclusions are based on a physical observation by the data enumerators and may therefore be subjective. However, some level of objectivity was introduced in the data collection process. During enumerator training, the SUWASA team and enumerators agreed on physical elements that would be observed and what exactly to look for. For example, on the state of the floors, enumerators were required to observe whether there was water that was not properly draining, thereby making the floors dangerous and unhygienic. The enumerators were then required to rank the particular item as either poor, fair or good and provide an explanation for their choice. The enumerators were also required to take photographs and debrief the SUWASA team on their ranking. In addition, the enumerators worked in pairs and therefore had to agree on the ranking. Thus, whilst the observation may not be objective from a scientific point of view, it does however give pointers to aspects that are working well and those that need more attention.

On a positive note, soap was observed to be available in all but one toilet.

3.12 Fecal Sludge Management at Public Toilets

All toilets, regardless of whether they are pit latrines or pour flush toilets reported using water for cleansing. The public toilets therefore are a key contributor to fecal sludge generation and transportation in the city. Respondents reported that on average the toilets take 13 days to fill up and that they are all emptied by exhauster tankers. The average cost of emptying was reported as SSP786 (US$253). This means that in a month, the toilets are spending an average of (US$506) on toilet emptying.

3.13 Profitability of Public Toilets

Even though it was not possible to get an accurate number of people using the toilets, it was consistently reported and also physically observed that there are more men than women using the toilets and an even bigger proportion of men using the showers compared to women.

On average toilets operate 13 hours a day and charge SSP1 for use of the toilet and SSP2 for showering per use. Respondents reported that on average they collect SSP353 (US$113) daily. On a monthly basis, operational costs for a public toilet come to about SSP 6,793 (US$2,193) for water, power, labour and general maintenance. This means that a typical sized toilet can make an operating profit of about SSP 1,678 (US$541) per month (Table 5).

Table 5: Typical Monthly Cost of Running one Public Toilet

Calculation of average cost of operation per Month		
Parameter	Cost(SSP)	Cost (USD)
Cost of water	2310	745.1613
Cost of electricity	370	119.3548
Cost of Emptying toilet twice a month	1572	507.0968
Labour for Cashier/ cleaners	863	278.3871
Sub-total operating cost	5115	1650
Maintenance costs at 10%[1]	511.5	165
Sub-total	5626.5	1815
Add mark up of 5%	281.325	90.75
	5907.825	1905.75
Add 15% Administrative costs[2]	886.1738	285.8625
Total average cost per month	6793.999	2191.613
Monthly Revenue	8472	2732
Operating Profit	1678	541

3.14 Regulation of Public Toilets

Although all the toilets are operating as businesses, the majority are not registered as formal businesses with relevant trading and other licenses (Table 6).

Table 6: Registration of Public Toilets

Registration of toilet as a business	
Yes	5
No	12
Don't know	4

This result is not surprising given that majority of the toilets are being operated on a small scale by the private sector, largely in an informal manner that would therefore help to avoid costs associated with formal registration.

In spite of this, it is evident from the survey that Juba City Council is interested in regulating and exercising oversight on the toilets. For instance, 16 toilets were reported to be registered with the Payam, whilst another 13 reported registration with Juba City. This is probably because the Council is more interested in levying the toilets rather than actual regulation. This would explain the apparent duplication of the registration function between the Juba City Council head office and the Blocks being reported by the respondents.

Further evidence of intent to regulate is provided by staff of the City Council who indicated that every toilet is supposed to be issued with a Certificate of Operation by the council. However, not a single toilet reported having the certificate and there was also no clarity on how much the certificate costs or how that fee is determined. It can therefore be concluded that this intent is yet to be enforced.

Not only is the registration process unclear, but there also seems to be lack of clarity on inspection of the public toilets. For instance, six toilets reported having been inspected by the council in the preceding two months; four reported an inspection long ago while four had never been inspected (Table 7).

Table 7: Regularity of Inspections

When	Number
This Month	3
Last month	3
Long time ago	4
Never	4
	14

This probably explains why the construction materials and standards of some of the toilets particularly those that are private sector financed are so poor.

The lack of oversight is also emphasized by the fact that only five toilets showed physical evidence and or reported use of protective clothing among the workers.

What these suggests is that, though there may be an understanding and willingness within the council on the need to regulate the operations of the public toilets, there is currently no clear system in place.

4.0 Discussion of Main Findings

4.1 Location of Toilets

It is interesting to note the physical concentration of public toilets in the two blocks of Munuki and Kator and very few in Juba. Munuki and Kator are the busiest locations which are most likely the most profitable for the private sector. On the other hand, the Juba payam comprises of middle to high income groups including government and UN installations which do not lend themselves to the use of public toilets.

However it is worth noting that within Juba in places like Tongping, there are a number of tukuls (mud huts) accommodating relatively large numbers of people who do not have good access to household toilets. However, the rapid gentrification of this part of town to medium and high cost means that public toilets may not be a priority in this part of Juba. This may also mean that finding land for public toilets in Juba payam may be more difficult as the land values there will be much higher than in the other two payams. On the other hand, the fact that the Juba payam houses most of the government offices means there is potentially a high volume of people who would require public toilet facilities.

4.2 Private Sector Participation is Key

The survey shows that public toilets are clearly a key and potentially financially viable part of the sanitation solution in Juba. In the first instance, since the first public toilets were built, the private sector has also stepped in and has been constructing the toilets at a faster rate than the public sector. This investment by the private sector means relief to the government in terms of capital investment requirements and should therefore be promoted and encouraged.

4.3 Public Sector Regulatory Role

The role of the public sector, whilst it can include capital investment, should be - to focus on regulation and providing an enabling environment for the private sector to bring in more investment and to operate according to required standards.

In particular, there is need for the public sector to provide and enforce building as well as health and safety standards. This is because even though the survey shows that most toilets are built from permanent materials (concrete blocks), there are still private sector people that will build using the cheapest materials which may not be the best in terms of health, safety and environmental standards.

In addition, there is a need to regulate against pit latrines as a technology for public toilets in Juba. This is mainly due to the fact that using water for cleansing is a general practice in Juba. This leads to poor performance of the toilet as the water leads to anaerobic processes which cause air pollution and a high presence of flies. The preference should therefore be for pour flush toilets with septic tanks.

It is important too that certain design aspects be improved upon. Firstly, most public toilets are not designed, built and managed with a gender sensitive perspective. For example, out of the total 21 toilets surveyed, only one was built with two separate blocks (one for men and one for women); eiight of the toilets were not separated between men and women (any one could use any toilet) and only half (10)

had a wall separating the women from the men. None of the 21 blocks had sanitary bins for women. Similarly, only eight toilets had hand washing facilities inside the toilet while the majority had the facility (container or basin) outside the toilet. Signage is generally non-existent, whilst lighting and security are also poor. All these elements mean that the toilets are not particularly suited to female users, and would need to be addressed.

4.4 Improved Operation and Maintenance

There is also a need for improved regulation and oversight over the toilets. It is evident that the use of protective clothing is almost non-existent. This poses unnecessary health risks for both staff and people using the toilets. There is need for both education and enforcement on the use and value of the protective clothing. In addition, there is need for improved and regularized inspections of the toilets to ensure compliance with required standards of cleanliness, privacy and security. This would involve discussions and agreements around whether all the payams should be involved in this or whether the function should be centralized within the Department of Environment and Sanitation within Juba City Council.

Finally, even though there is currently no apparent issue with pricing, it would nonetheless be important to ensure that the pricing is regulated in order to encourage use of the toilets.

5.0 Challenges and Lessons Learned

1. There were no major challenges experienced with this survey mainly due to the fact that the enumerators had previous experience from the household baseline survey which made it easier to train them and get them to understand what was expected of them.

2. Getting security clearances and also being escorted by the Block authorities made carrying out the task easier and safer. In post-conflict situations like South Sudan, this is important as people are still very suspicious of data collectors.

3. Respondents were generally ready to provide information based on the questionnaire but were not as open to the idea of enumerators doing an actual count of the people using the toilets. This was probably due to the fear that the information could be used against them by the authorities for the purposes of taxation.

4. Data analysis, ability to follow up on data cleaning and completion of the report were severely delayed by the political crisis that erupted in December 2013.

5. At least one public toilet that had been constructed by USAID had been demolished by the time of the survey. This means that getting the right location and agreement among stakeholders about these locations is crucial to long term sustainability particularly in a context where land is at a premium.

6. On a very positive note, the collaboration between SUWASA, Juba City Council and Juba County, has made for production of a very useful and interesting report that provides key information about the presence and operation of public toilets in Juba, information that was hitherto un-available.

7. Aside from the council, the young data enumerators have benefited from extra skills in research and social skills, income and also greater understanding of the sanitation challenge in Juba. Furthermore the SUWASA team has passed on these skills to the staff of the city council and ensured that the project has a good and productive relationship with the key client partners. Finally, the entire SUWASA team has continued to strengthen its skills in dealing with data gaps and this approach can be replicated relatively easily by both SUWASA and the Republic of South Sudan in other cities and towns and indeed beyond South Sudan.

References

Government of South Sudan, 2008 Southern Sudan Centre for Census, Statistics and Evaluation (SSCCSE)

SUWASA-USAID, 2013, Juba Sanitation Mapping and Household Survey

WSP 2010, Country Status Overview, Water Supply, Sanitation and Hygiene in Southern Sudan, Draft

Appendix

Appendix A: Sanitation Survey Questionnaire

Juba Sanitation Survey and Mapping
Assessment of Performance of Public Toilets
Interview Guide

Name of Enumerator_____

Date:_____/_____/2013 (dd/mm/yy)

Good morning/afternoon, my name is _____ I have been engaged by Juba County council to collect information about Public toilets operating in Juba. The information collected is strictly confidential and will be used by the County with Support from SUWASA to improve sanitation services in Juba city. I will be grateful if you could spend about One hour to answer some questions about your exhauster business. Are you willing to participate? If so, Kindly sign here to indicate your consent.

Sign_____

A. Demographics

1. Role of the respondent? (Tick as appropriate). **DO NOT** interview if the respondent is neither of these two categories.
    a. Owner of the toilet block
    b. Employee managing the toilet block
2. Nationality of respondent_____
3. Nationality of ***owner*** of toilet facility_____
4. Gender of respondent (Tick appropriate one)
    a. Male
    b. Female
5. Age of respondent (years): _____
6. Location of toilet block.
    Payam: _____
    Boma: _____

Location of toilet	a) Market b) Bus stop c) Others specify_____
Type of toilet	a) Pit latrine b) Flush toilet c) Pour Flash d) Others(Specify)_____
When was the toilet constructed (mm/yy)	
Who financed the construction of the toilet	a. Private individual b. Private company c. National government d. State Government e. Local Government f. A donor or NGO (Name)_____ g. Do not know
How much did the construction cost (SSP)	
When was the toilet opened to the public (mm/yy)	
Number of toilet blocks (#)	
Total Number of toilet units in the blocks (#)	
Does the toilet block have a urinal	a) Yes b) No
Are the toilets provided for both men and women	a) Yes b) No
How many shower rooms are in the blocks (#)	
Are the showers provided for both men and women	a) Yes b) No
Do people collect water for drinking or other purposes from the block	a) Yes b) No

1. Building material information (*Tick/specify where appropriate*)

1.1. What is the superstructure of your toilet made of?								
	Waterborne	Pour flush	Ecosan	VIP	Urine Diversion	Improved Traditional	Unsafe Traditional	Other
	1	2	3	4	5	6	7	8
1.2. Door								
Wood								
Plastic								
Carton								
None								
Others (Specify)								
1.3. Wall								
Concrete block								
Burnt bricks								
Timber								
Iron Sheets								
Grass								
Mud								
Sacks/ plastics								
None								
Other (specify) 1								
Other (specify) 2								
1.4. Roof								
Iron Sheets								
Asbestos								
Plastics								
Sacks								
Grass								

None								
Other 1 (Specify)								
Other 2 (Specify)								
Other 5								
1.5. Floor								
Cement								
Ceramics-Tiles								
Mud								
Others								
1.6. Ventilation								
Windows								
Air vents								
Others (Specify)								
1.7. Toilet (inside)								
Squat pan								
Toilet pan								
Others (Specify)								
1.8. Hand washing facility								
Wash hand basin inside the building								
Wash hand basin outside the building								
Tap inside the building								
Tap outside the building								
Container inside the building								
Container outside the building								
No hand washing facility								

D. Connection of the Toilet Block to Municipal Services

Is the toilet facility connected to	a. Municipal water network b. Water tank supplied by a tanker c. Private borehole developed for the toilet block d. Ordinary water carriers e. None of the above (explain how they get their water_____
Do you have a water storage facility, how many litres	a) Yes (litres)_____ b) No
How much do you pay for water/day to run the toilet block **(SSP)**	
Where else to you get water when there is no water from the main source	
Is the toilet block connected to	a. Council sewer line b. Septic tank c. Neither of the above (describe how your human waste is collected and stored)_____
If the toilet block is on a council sewer line, how much do you pay for the sewerage service per month? **(SSP)**	
Does the sewer line ever get blocked?	a. Yes b. No
If yes, how often does it get blocked?	
If yes, what do you do when the sewer line gets blocked?	
If the toilet block is on a septic tank	
a. How often the tank does get full?	
b. what do you do when the tank gets full	
c. Which companies empty the septic tank for you?	
d. How much do you pay to get the tank emptied?	
e. When was the last time you had the septic tank emptied?	
If the toilet block is a pit latrine	
a. How often does it get full?	

b. What do you do when the pit gets full?	
c. Which companies empty the pit latrine for you?	
d. How much do you pay to get the pit emptied?	
e. When was the last time you had the pit latrine emptied?	
Is the toilet block connected to	a. Government power supply b. Own generator c. Private power supplier d. All of the above e. No power supply
If on Government power supply, how many hours a day do you get supply?	
How much do you spend on the Government power supply every month? **(SSP)**	
If own generator, how many hours a day do you run the generator? **(Hours)**	
How much do you spend on the generator every month? **(SSP)**	

Operation of the Toilet Block

Is this toilet facility registered as a business with a trading license	a) Yes b) No
I yes, what is the trading name	
How many people are employed to work in the toilet block? (List them by job title)	
What are the hours of opening of the toilet block? (Hours)	
What is the average number of people that use the toilet every day? (#)	a. Men: _____ b. Women: _____

What is the average number of people that use the shower every day?	a. Men: _____ b. Women: _____
What is the average number of people that collect water from the facility every day?	a. Men: _____ b. Women: _____
How much do you charge for use of the facilities per use?	a. Toilet:_____ b. Shower: _____ c. Water supply: _____
List all the government agencies with which the public toilet is registered	i. Juba City Council ii. Registrar of companies iii. Central Equatorial State Government Other(specify)_____
When the last time was the Juba City Council came to inspect your premises?	
Does the toilet block business have a bank account?	a) Yes b) No
List the main challenges you face in running the toilet block?	

Physical Observation

(Observe and take photographs of the following)

- The state of repair of the toilets, urinals, showers and hand washing facilities
- Availability of sanitary bins in the ladies toilet
- Floor of shower rooms
- The cleanliness of the facilities
- The drainage of water both inside and outside the toilet
- General maintenance of the toilet block
- Signage on the toilet blocks
- Lighting, conditions for privacy and security in the toilet block

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