



National Urban Water Corporation, the Sudan

Directorate-General International Cooperation, the Netherlands

Sustainable Water Supply Systems in Small Cities



The Lessons from Darfur

Volume II: Annexes

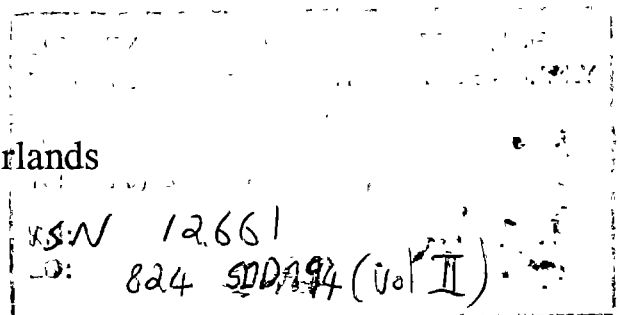
June 1994

Sustainable Water Supply Systems in Small Cities

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Volume II: Annexes

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ANNEXES

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ANNEX A

**SECTION DESCRIPTIONS
NYALA**

1. OPERATIONS SECTION

SECTION TASK DESCRIPTION

- Activate pumps according to prepared schedules
- Monitor operation of pumps
- Report anomalies to Chief of Pumphouse
- Periodically record readings of water meters in water production network

WORK PROCEDURES

- Operators work from 6 a.m. - 2 p.m.)
or from 2 p.m. - 10 p.m.) for 6 days
or from 10 p.m. - 6 p.m.)
- Hereafter they rest for 48 hrs
- The 3 remote stations are manned by one operator at one time, accompanied by a watchman
- In the pumphouse, the staff present at all times is: one pump operator and two operator assistants
- On one of the remote stations the operator and watchman work without the 48 hour rest
- All operators receive 2 hours of overtime each day (an up-coming letter from NUWC's DG is said to mention 130 hours of overtime each month)

ESTIMATED WORK LOAD

- All operators just have to be present and perform routine duties: switch pumps on and off and report any pump failure to the chief of the pumphouse

TARGET SETTING

- Ten year pump life

STAFF REQUIREMENT

- 5 operator posts at 4 shifts plus 1 operator post at 3 shift requires: 23 operators
- 2 literate employees perform meter- and water level reading and assist the mechanical maintenance team; they are also reserves in case of sickness and leave of other operators
- 1 section chief
- Total staff required under present schedule: 26

STAFF PRESENT (August 1993)

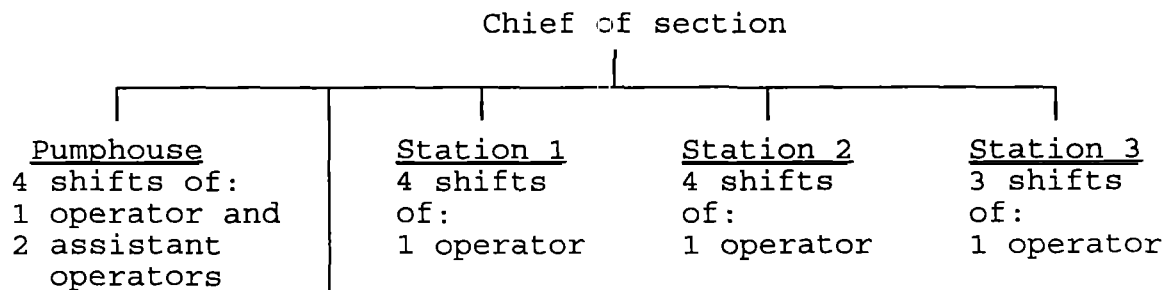
- 27 staff of appropriate rank and capability are employed in this section
- Section is composed of:
 - 1 commander
 - 6 shift chiefs
 - 5 shift chief assistants
 - 15 labourers
- 2 shift chiefs are temporarily detached to Kas

LOAD ON STAFF

- Per definition the operations section staff is under 100% load, though only little time is spent on work activities

ORGANIZATIONAL STRUCTURE (actual)

- The chief of the section reports to the Water Engineer
- All operators report directly to the chief of the section



At pumphouse: 2 spare operators who perform various recordings

EQUIPMENT AND MATERIALS EMPLOYED

- Of the 13 usable boreholes and wells only 9 are equipped with working submersible pumps
- 8 boreholes are equipped with Grundfos control panels featuring several protection devices, see fact sheet
- The Grundfos control panels protect the pumps against overload, uneven power supply on the different phases, while 5 feature an overload indicator
- Submersible pumps are not protected against running dry by electrode sensors, although the 8 Grundfos are wired for such protection
- The Railway- and Museh stations have recently been provided with brick walled control rooms (6X4 m)
- The Karari station has its control panels in the open air and has a grass hut personnel shelter
- The central pumphouse is equipped with 5 electrically powered booster pumps:
 - 2 provide the community kiosks with water and
 - 2 provide the rest of the town (these two pumps have been installed in April 1991)
- The motor of the fifth booster pump is defective since 1990
- All electricity is supplied by the local power utility

ISSUES

- The operators at the remote stations can only switch the pumps off and on
- They can check if power arrives at the stations
- After an automatic shut-off they can try to restart a pump when power supply conditions have improved, in other cases they have to alert the maintenance sections, which only operate during the day shift
- The WSEP technical consultant has advised not to install dry-run protection on the submersible pumps, as it would even be relied upon when accidental- or otherwise shorted
- This consultant conveyed that frequent water level measurement and stopping the pump, when the danger zone is approached, gives better protection

CONCLUSION AND OPTIONS

- The level of current staffing of the section is determined by the decision that the remote stations are to be manned continuously. The necessity of this is not obvious and the question should be raised of what advantages

are lost if the doors of the stations will be locked and the stations will be inspected once or twice a day (the Water Corporation in Nyala will soon receive two motorbikes)

- During the last few years at least two submersible pumps have been lost each year
- Installation of dry-run protection and regular resistance checking can give better pump protection than is obtained today as the installed depth of all the pumps is not well known and the draw down can vary at different depths
- NUWC plans to construct a third control room at the Karari station which would allow for a further reduction of the number of operators if NUWC decides to change the operating procedures

OPTION FOR CHANGE

- | |
|--|
| <ul style="list-style-type: none">- When the Water Corporation is successful in increasing the safety of the submersible pumps, it can be tested if locking the doors of the remote stations does not constrain either the water supply or the safety of the installations- Surplus labour could be employed for the extension of the water supply system |
|--|

2. MECHANICAL MAINTENANCE SECTION

SECTION TASK DESCRIPTION
<ul style="list-style-type: none">- Maintenance and repair of the booster pumps- Placement and replacement of submersible pumps
WORK CONDITIONS
<ul style="list-style-type: none">- Working hours: 6.30 a.m. - 3.00 p.m.- Six working days per week- 2 hours of overtime are paid per day, extra for work on holidays
ESTIMATED WORK LOAD
<ul style="list-style-type: none">- Replacing parts of booster pumps when required- Greasing of booster pumps every three months- Changing and repair of valves in and near pumphouse when required- Monthly reading of six meters and water levels in boreholes (this work is also claimed by operations section)- Welding work when required
TARGET SETTING
<ul style="list-style-type: none">- All booster pumps to be back in operation within 24 hours- Much other mentioned work is rather incidental
STAFF REQUIREMENT
<ul style="list-style-type: none">- The frequency of all above tasks is very low and seems to require much less than one man

STAFF PRESENT (August 1993)

- 7 staff employed, of which one on suspension
- Staff composed of:
 - 1 observer
 - 1 commander
 - 1 mechanic 1st class
 - 2 mechanics 2nd class
 - 1 mechanic assistant
 - 1 labourer

LOAD ON STAFF

- The load on the staff must be estimated as less than 15%

ORGANIZATIONAL STRUCTURE (actual)

- Observer reports to Water Engineer
- All other section staff reports to the observer

ISSUES

- The entire skilled staff has participated in a customized course at the Nyala Technical High School in 1991
- This course has been arranged by ISMDP
- ISMDP also supplied this section with a set of hand tools (periodic inventory check should be made) and a electrical welding machine

CONCLUSION

- The actual overstaffing is likely to be the result of adherence to the "personnel establishment"
- Most of the work can be performed by one person. If handling of heavy parts is needed, pump operators or pipefitters could be called in
- This section is so small that it should be merged with the electrical maintenance section, thereby reducing the span of control of the Water Engineer
- It should be made clear which section should read the production meters and take the water levels

OPTIONS FOR CHANGE

- Merger with the electrical maintenance section
- Reduce the staff stepwise to two when the occasion presents itself

3. ELECTRICAL MAINTENANCE SECTION

SECTION TASK DESCRIPTION
<ul style="list-style-type: none">- Perform maintenance, trouble-shooting and repairs on borehole- and booster pumpmotors, wiring and control devices- Maintain electrical equipment and wiring on the NUWC-Nyala premises

WORK PROCEDURES
<ul style="list-style-type: none">- Working hours: 6.30 a.m. - 3.00 p.m.- Six working days per week- 2 till 5 hours of overtime are paid per day

ESTIMATED WORK LOAD
<p>Regular:</p> <ul style="list-style-type: none">- Repair control boxes of booster- and submersible pumps- Perform maintenance on electro motors of booster pumps (?) <p>Incidental:</p> <ul style="list-style-type: none">- Install and repair electrical connection on NUWC office compound- Produce and erect low tension poles for borehole pumps- Make electrical connection on submersible pumps

TARGET SETTING
<ul style="list-style-type: none">- Virtually all work has an incidental character and no production targets can be set

STAFF REQUIREMENT
<ul style="list-style-type: none">- The September activity report shows 10 jobs which could be done by one man within a day or much less

STAFF PRESENT (August 1993)

- 7 staff employed, of which one is temporarily detached to Zalingei
- Staff is composed of:
 - 1 commander
 - 2 chief technicians
 - 2 electrician 1st class
 - 1 electrician assistant
 - 1 labourer
- One chief technician is temporarily detached to Kas and one electrician 1st class to Zalingei

LOAD ON STAFF

- When no new borehole is being equipped the load on the staff is less than 15%

ORGANIZATIONAL STRUCTURE (actual)

- Commander reports to the Water Engineer
- All chief technician and electricians report to the Commander

ISSUES

- The entire staff has participated in a customized course on motor winding at the Nyala Technical High School in 1991. In 1992 they participated in a course in the same school. This time a wide range of subjects were taught, which have a direct bearing on their daily work.
- The staff has a strong tendency to blame a protection device as a source of malfunctioning, while the real cause lays some where else. The protection device is then modified, whereby it is (partly) destroyed, to keep the system going. Negotiations are going on with the Nyala Min. of Labour/ILO Vocational Training Center for a special course to address this issue.

CONCLUSION

- Also in this section the actual overstaffing is likely to be the result of adherence to the "personnel establishment"
- Most of the work can be performed by one, maximum two person. If a larger job is to be carried out, like the erection of poles, other sections could provide assistance
- Also this section is small and can easily be merged with the mechanical maintenance section

OPTIONS FOR CHANGE

- Merger with the mechanical maintenance section
- Transfer all except two electricians when the occasion presents itself
- Pursue the Vocational Training Center option
- Some staff should be trained and instructed to regularly test the dry-run electrode connections extremely well, once the decision is taken to install those

4. PIPELINES SECTION

SECTION TASK DESCRIPTION

- Maintain, repair and upgrade pipeline network
- Survey locations for new consumer applications
- Install new consumer connections

WORK CONDITIONS

- Repair teams work normally from 6.30 a.m. - 2.30 p.m. and six days a week
- Emergency team is one of the work teams which is present to work on leaks after working hours. They work for two nights and the return to day work.
- 70, 80, 90 or 110 hours of overtime are paid per month depending on the type of work done

ESTIMATED WORK LOAD

- Reports on repairs over the 9 month period October 1992 - July 1993 show that 1066 man-days of repair work has been done. A man-day of work is here not defined as a full day of work, but as a day on with at least some work has been done.
- The emergency teams do hardly any repair work after normal working hours. They just close a valve if a leak is reported. The emergency team has a car assigned to it.

TARGET SETTING

- An official NUWC standard is not known, but one international standard mentions that repair staff should be active 60% of the time
- Because of the seasonal influence on the prominence of leaks during the rainy months this may be lowered to 30%

STAFF REQUIREMENT

- With the current frequency of repairs 1422 man-days are needed per year
 - If the staff is supposed to do repair work on 30% of the days then (100/30 times 1422 =) 4740 man-days need to be available
 - As an employee can put in 240 working days, this will require a section staff of 20
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STAFF PRESENT (August 1993)

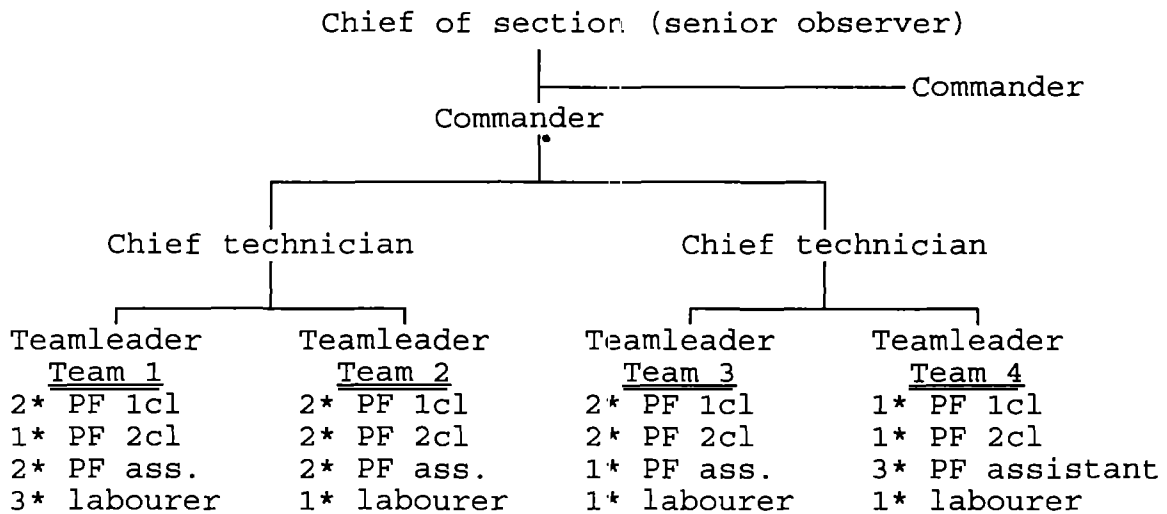
- 37 staff employed, of which one chief technician is detached to Kas
- Staff is composed of:
 - 1 senior observer
 - 2 commanders
 - 3 chief technicians (one in Kas)
 - 5 pipefitters 1st class
 - 8 pipefitters 2nd class
 - 8 pipefitter assistants
 - 10 labourers

LOAD ON STAFF

- The section has reported information which can be analyzed and indicates that, over the period October 1992 till July 1993:
 - a. on 52% of the days no repairs have been carried out
 - b. only on 4% of the days, more than 15 staff were engaged in repairs
 - c. only on 1% of the days, more than 20 staff were engaged
 - d. a section employee is only active on 17% of the days (assuming that he can work 240 days per year)
 - e. as the emergency team hardly ever repairs leaks it has only to exist of one or two persons (now 6)

ORGANIZATIONAL STRUCTURE (actual)

- The chief of the section reports to the Water Engineer
- All commanders, chief technicians and pipefitter teamleaders report to the chief of the section



(PF= pipefitter)

ISSUES

- Reporting on repairs has shown two things:
 - a. the workload of the repair teams is very low
 - b. many spots are repaired over and over againThe most notorious trouble spots are now being rehabilitated. The pipes in these spots are laid deeper and are often replaced with pipes of stronger material.
- As these weak spot are now being rehabilitated, the future need for repair will be substantially lower. As Nyala still holds a good stock of ductile iron pipe, this can be used to make network extensions. Theoretically this can be done by the surplus of workers in the technical departments, but the 'civil servant attitude' does not instill courage to dig several kilometers of trenches. Tough management and support by the labour union can overcome this hurdle. It will need good preparation

CONCLUSION

- Continued rehabilitation of the network will strongly reduce the need for future repairs
- Ample labour availability and the stock of ductile iron pipes offer a unique opportunity to serve a much larger part of the Nyala's population with piped- or kiosk water. Once the mains are laid, extensions can be developed through community initiative
- The emergency team can be reduced to one or two persons, who can close valves with a large adjustable wrench on bicycles, thus eliminating the need for a vehicle and a driver on stand-by
- Pipes for large repairs can even be moved by horse cart
- The low work load makes reduction of the staff to at the most 20 persons possible

OPTIONS FOR CHANGE

- Transfer of about half of the staff to other activities or outplacement
- Strong reduction in the need for vehicles
- Use of repair staff for extension of the network

5. METER MECHANICAL- AND INSPECTION SECTION

SECTION TASK DESCRIPTION

- Inspect water meters routinely and on special indication
- Test and repair water meters
- Dis- and reconnect water users on indication of consumer accounts department
- Inspect construction activities on increased water consumption

WORK CONDITIONS

- Mechanics and inspectors work from 6.30 a.m. - 2.30 p.m. and six days a week
- Staff receives 80, 90 or 110 hours of overtime each month depending on the amount of work executed
- 50% of the reconnection charge is distributed among the staff of this section and the staff of the consumer accounts-, meter reading- and treasury sections

ESTIMATED WORK LOAD

- NUWC Nyala maintains about 1700 meters, which the section has to inspect and maintain
- Nyala town has about 5500 house and other connections, which the section should inspect and potentially disconnect
- In the 1992-93 season 140 (between 54 and 282) disconnections/month had to be made and about the same number (between 80 and 207) of reconnections
- A mechanic on disconnection route is always accompanied by an inspector, who inspects the neighbouring houses
- An average of 8 new consumer meters (between 3 and 22) have to be tested each month

TARGET SETTING

- In 1991-92 this section made a house survey, whereby 40 houses were surveyed per manday. During the same operation house numbers have been painted.
- Disconnection lists are issued for blocks so many disconnections can be made in the same block, allowing for

minimal travel time. The target for the number of disconnection can be set at 20 per team-day

- Reconnection operations are performed just after the consumer has paid up. This rather fast service increases the travel time of the reconstructor and lowers efficiency. A team should be able to perform at least 10 reconnections per day.

STAFF REQUIREMENT

- If 200 disconnections are made at 20 per team per day, then the disconnection operation will require 10 team-days each month (the 282 maximum is ignored as it was caused by an avoidable irregularity of the consumer accounts section)
- The reconnection activities take twice as much time: 20 team-days each month
- Inspection work is done by the other member of the team and should be performed during the time that the mechanic is busy dis- or reconnecting
- Both above mentioned activities combined require 30 team-days. One team can work on the average 20 days.
- Two teams should be able to perform all disconnection, reconnection, house inspection and meter cleaning work

STAFF PRESENT (August 1993)

- 14 people employed
 - Staff is composed of:
 - 1 commander
 - 2 chief inspectors
 - 3 mechanics 1st class TL
 - 1 inspector 1st class TL
 - 1 mechanic 2nd class
 - 3 inspectors 2nd class
 - 3 labourers
- (one chief inspector works on community kiosks)
TL: teamleader

LOAD ON STAFF

- 4 mechanic/inspection teams can provide 80 team-days per months; 30 team-days are required: load on mechanic/inspection teams is 37.5%
- One chief inspector can easily test all new meters and repair the ones that are brought to the section
- It is not clear what the function of the labourers is

ORGANIZATIONAL STRUCTURE (actual)

- Commander reports to the Water Engineer
- Chief inspectors and teamleaders report to commander

ISSUES

- In the recent past the leadership in the consumer accounts section has been very weak. This caused a very irregular flow of disconnection notices to this section. Once the flow is more regular the workload should fall even further.
- It is estimated that the cost of a combined disconnection/reconnection activity is close to LS 1000. The official charge (set by NUWC HQ) is LS 200, half of which is immediately redistributed as an extra remuneration to the staff. The nett unpaid cost of each disconnection is thus a loss of about LS 900 to the water corporation. The reconnection charge should be substantially increased as well paying consumers are now sharing the burden caused by the badly paying ones. This charge increase would by itself lower the number of undisciplined customers.
- When disconnected consumers pay their dues they expect to be reconnected immediately. The water corporation reconnects most often within 24 hours, which makes the reconnection activity very inefficient.

CONCLUSION

- This section appears to be seriously overstaffed as a result of the irregular supply of disconnection notices by the consumer accounts department but also by a poor organization of the work.
- Too late payment of waterbills is abnormal behaviour and should not be effected by social considerations of setting the level of the penalty far below cost to the water corporation and to the community.
- The same abnormal behaviour should also not be honoured with the very fast reconnection practice which causes enormous inefficiencies in this section.

OPTIONS FOR CHANGE

- Constant insistence on regular supply of disconnection notices
- Increase of reconnection charge to consumer to the level of LS 1000 (summer 1993 cost level)
- Weekly reconnection per block to increase reconnection efficiency
- Adequate analysis of section records to allow for work organization improvement

6. METER READING SECTION

SECTION TASK DESCRIPTION

- Read all consumer water meters every month
- Report on water consumption to consumer accounts section
- Report on condition of water meters to meter mechanics section

WORK CONDITIONS

- Working hours: 7.30 a.m. - 2.30 p.m.
- Six working days per week
- As meter readers are not paid for overtime they receive a meal allowance

ESTIMATED WORK LOAD

- Nyala has 1700 working consumption meters to read
- These readings must be recorded on reader cards and transferred to the consumer account books by the supervisor (average: 71 per working day for the section as a whole)

TARGET SETTING

- All consumption meters have to be read monthly
- Each meter reader is to read at least 900 meters/month

STAFF REQUIREMENT

- NUWC's norm is that every 900 working meters justify one meter reader position. A reader can read more than 40 meters per day, which translates into 8 per hour.
- The strict requirement for this section is only three staff which includes the supervisor

STAFF PRESENT (August 1993)

- 1 meter reader supervisor
- 1 meter reader supervisor assistant
- 4 meter readers

LOAD ON STAFF

- With the current number of meters and good organization (minimal travel time, minimal number of blocks, minimal number of books to adjust):
readings 1700/900 : 1.9 manmonth
recording into C.A. books 1700/60 per hour: 0.2 manmonth

Total work load expressed in time 2.1 manmonth
- Load on staff: 2.1 / 6 or 35%

ORGANIZATIONAL STRUCTURE (actual)

- The chief of the meter reading section reports to the Inspector of Accounts
- All other staff reports to the chief of section

ISSUES

- Meter readers travel on foot or for far areas by vehicle

CONCLUSION

- Meter reading is a quick and easy operation and the coverage of Nyala with meters is rather low
- There is surely no need for an assistant to the meter reader supervisor and the supervisor can participate in the reading activities himself
- When bicycles are provided the need for vehicle transportation will be eliminated

OPTIONS FOR CHANGE

- Transfer of some meter readers to other activities
- Provision of bicycles to readers
- Merging of this very small section with consumer accounts

7. CONSUMER ACCOUNTS SECTION

SECTION TASK DESCRIPTION

- Prepare bills for water consumers on basis of own records and data from meter reading- and treasury sections
- Keep records on water consumption receivables
- Report on status of accounts receivable to management
- Prepare dis- and reconnection statements for meter mechanics section

WORK CONDITIONS

- Working hours: 7.30 a.m. - 2.30 p.m.
- Six working days per week
- As accountants are not paid for overtime they receive a meal allowance

ESTIMATED WORK LOAD

5265 house connections
12 concessionaire kiosks
143 government institutions
130 commercial and industrial clients
4 tankers
25 new customers

- The town has been subdivided in blocks and each consumer account is assigned a number of these blocks. She/he only deals with the private connections in these blocks.
- Customer that want to pay consult the consumer accounts office and get information on the amount due, whereafter they pass-on to the cashier to pay.

TARGET SETTING

- One consumers accounts clerk for every 700 consumers
- Under no circumstances should the consumer accounts books be more than five working days behind in showing the actual situation

- On the seventh of every month an accounts receivable report is submitted to the management, reflecting the situation on the last day of the previous month
- Every month a disconnection list for every block is to be produced and submitted to management
- The chief of section reports every saturday before fatour to the inspector of accounts, till what date the books on all the blocks and customer categories are current. The inspector of accounts discusses this report the same day with the chief of the consumer accounts section and decisions on measures to redress the situation are immediately taken.

STAFF REQUIREMENT

- As every consumer accountant serves between 700 and 800 consumers, seven accountants are required to keep the books for the 5265 private connections
- As it is essential that records are kept up to date and reports submitted in time, one more accountant should be added, to fill during sickness and leave
- The chief of the section handles the 300 customers of the other categories.
- Private connections require less time as no bills need to be issued. The nationally standard of 700 customers, is set for customers of all categories, and if the more labour intensive customers are left for the section chief, while supervising the rest of the staff it is necessary to raise the numeric target for accountants handling private connections only.

STAFF PRESENT (August 1993)

- This section's staff consists of 9 persons (including the section chief)

LOAD ON STAFF

- Considering 700 customers per accountant an full load this section is under 88% load.

ORGANIZATIONAL STRUCTURE (actual)

- The chief of the consumer accounts section reports to the Inspector of Accounts
- All other staff reports to the chief of section

ISSUES

- In 1992 and the first half of 1993 the sections has been much behind with keeping the books up-to-date. Some blocks were up to 10 months behind, while other accountants had their books fairly up-to-date.
- Some accountants have not provided disconnection lists for the last 12 months.
- Billing to government institutions has been extremely irregular and institutions have often received only one or two bills a year instead of one every month.
- In 1992 a new system has been set up for consessionaire kiosks and all water meters have been checked, repaired or replaced, but unfortunately the follow-up by the responsible accountant has be such that this year, revenues from this category became very low again while much water was sold through these kiosks.
- Because of continued underperformance of this section, its chief has been replaced in August 1993.
- The inspector of accounts has been almost always absent during the last year and a half, and it has been announced that another well be appointed in his plase soon.
- The tanker filling point can serve two tankers at the time. Water is only issued on handing in of a delivery note written by the consumer accounts section. Tankers from institutions can take water charged to their account with NUWC. Other customers have to pre-pay. It has been observed that the revenue from this category are not in line with the water issued at the tanker filling point.

CONCLUSIONS

- Although sufficient staff is available and systems are rather adequate, the section has been 4 - 6 months behind with its work.
- This backlog must be attributed to incompetent leadership of the section and almost complete absence of supervision by the inspector of accounts.
- Lack of supervision has seriously eroded discipline and most of the professional pride in this section.
- The same lack of adequate supervision has resulted in the backlog, the lack of billing and half-hearted application of the systems.

OPTIONS FOR CHANGE

- The restoration of supervision is the single most important measure to get the section on the track of satisfactory performance and care should be taken that the section does not glide back after being improved.
- The chief water engineer and inspector of accounts should investigate if the procedures for concessionaire- and tanker sales are correctly applied, as observations and estimates lead to the idea that revenues from these categories should be much higher.
- Introduction of a consumer accounts registration system as proposed in the Accounting and Financial Advisor's, Nyala mission report of October 1992, can simplify the record keeping while making information available on the age of receivables.

8. TREASURY SECTION

SECTION TASK DESCRIPTION

- Receive and record cash- and bank payments
- Collect revenue from community kiosks weekly
- Pay out salaries and wages as per statement prepared by the general accounts section

WORK CONDITIONS

- Working hours: 7.30 a.m. - 2.30 p.m.
- Six working days per week
- As accountants are not paid for overtime they receive a meal allowance

ESTIMATED WORK LOAD

- Potential clients at cashier's desk:
 - 5265 house connections
 - 12 concessionaire kiosks
 - 143 government institutions
 - 130 commercial and industrial clients
 - 4 tankers
 - 25 new customersTotal: 5578 potential visitors
- Most clients do not pay every month as, according to the cashier's reports, the number of paying visitors at the cashier's desk is only about 2000 per month
- The cashier collects the income from the community kiosks by vehicle once a week
- Once a month the cashier pays the wages and salaries to about 200 staff

TARGET SETTING

- Cashier's work requires perfect accuracy and honesty

STAFF REQUIREMENT

- During office hours the assistant cashier is permanently present to receive payments
- The cashier keeps all records, deposits the receipts at the bank daily and collects the community kiosks' revenue once a week

STAFF PRESENT (August 1993)

- 1 cashier and 1 assistant cashier

LOAD ON STAFF

- The assistant cashier cannot take on other work as he is to be permanently available to receive payments
- The cashier could be assigned other small tasks like production of special financial reports

ORGANIZATIONAL STRUCTURE (actual)

- The chief of section (cashier) reports to the Inspector of Accounts
- The assistant cashier reports to the chief of section

ISSUES

- Recently it has been found that a cashier deposited less money at the banks than he stated in his own records. Upon reception of the "hand-written" monthly bank statements, he changed the deposited amounts on these statement to conform with his own records. A first audit did not reveal that the figures did not add up to the totals on the statements.
- Apart from the abovementioned event the section performs well and hands in the reports in time.

CONCLUSION

- This section is adequately staffed and generally perform well.
- The person depositing the cash may never be the one receiving the bank statement, especially since such statements are still handwritten. Conversely the person, or even the section, that prepares the salary- and wages statements should not pay out the money.

OPTIONS FOR CHANGE

- Tasks, which combined can give opportunity to malversations, may only be carried out by different people and even by different sections. Even when this rule is strictly applied, the supervisor should check thoroughly and constantly so no malversations occur.

9. SECTION

SECTION TASK DESCRIPTION
<ul style="list-style-type: none">- Prepare records of all financial transactions and process accompanying paperwork- Prepare periodic financial reports for management and State Director's office, by elaboration of primary records into ledger system, periodic balances, profit and loss accounts and analytical reports- Prepare salary and wages statements- Prepare accounts payable documents- Prepare monthly summary for reporting to State Director's office

WORK CONDITIONS
<ul style="list-style-type: none">- Working hours: 7.30 a.m. - 2.30 p.m.- Six working days per week- As accountants are not paid for overtime they receive a meal allowance

ESTIMATED WORK LOAD
<ul style="list-style-type: none">- Regular activities:<ul style="list-style-type: none">Preparation of salaries and wages sheets: 8 mandaysPaperwork- & cheque preparation for scheduled payments and receipts : 1 mandayBank reconciliations : 2 mandaysBooks of prime entry (cash- & Bank daybooks) : 4 mandaysJournal-, ledger-, trial balance, balance and P. & L. account postings : 5 mandaysMonthly summary for State Dir. office : 2 mandaysMonthly management reports : 2 mandaysVisits to banks 20 x 1.5 hrs = 30hrs : 5 mandays

- Unscheduled activities:
 - Paperwork and cheque preparation for purchases, contract work and incidental payments (15-30 per month) : 4 mandays
 - Work on new customer connections : 1 mandays
 - Meetings, courses, etc : 3 mandays
 -
 - Total : 37 mandays

TARGET SETTING

- All activities in the general accounts department are to be scheduled, and assigned to persons, on a monthly basis by the chief of the section and approved by the inspector of accounts (I.o.A.). The chief of the section reports weekly to the I.o.A. on the progress.
- Reporting is to be completed and transmitted on scheduled and preapproved dates.
- Preparations for purchases, incidental payments to staff and contractors are to be performed as soon as possible, as not to hamper the work progress in the corporation.
- In case of absence of the section chief or I.o.A. clear arrangements are to be made for approvals so deadlines can still be met.

STAFF REQUIREMENT

- The 37 mandays of estimated work translate into two full time positions

STAFF PRESENT (August 1993)

- one chief accountant
- three accountants
- the inspector of accounts can part-time participate in activities of this section

LOAD ON STAFF

- Assuming that staff works on the average 20 days a month then the load on the staff is $37/(4 \times 20)$ or 46.5%.

ORGANIZATIONAL STRUCTURE (actual)

- The chief of section reports to the Inspector of Accounts
- All other staff reports to the chief of section

ISSUES

- As of August 1993, the accounts department does not have an inspector of accounts assigned to work in the corporation.
- The leadership within the section is not clearly assigned and as a consequence work organization and work discipline are hardly perceivable.
- During the last few years, the performance of this section has been inadequate resulting in enormous backlogs and inaccurate work. The senior staff in this section has been promoted to responsibilities for which they did not have either the training or the capacity. More junior staff is better trained.
- Procedures have been started to address the inadequate staffing situation of this section as well as to appoint another I.o.A.
- The accountants have followed two in-house courses on commercial double entry accounting presented by personnel of Management Development Center (MDC), Khartoum. Presently the staff is being trained on the job with the actual introduction of double entry accounting in Nyala.

CONCLUSION

- The output of this section has recently been inadequate, quantity- as well as quality wise.
- The absence of real leadership (in the department as well in as the section) is the main reason for this underperformance.
- As much effort is given to training and procurement of staff in leadership roles, much progress is to be expected by the end of 1993.

OPTIONS FOR CHANGE

- The introduction of the commercial double entry accounting system is by now well under way and new leadership is said to be on its way to Nyala. The proposed reporting systems, complete with reporting on progress, if conciously applied, will have a strong positive influence on the general performance of this section.
- Strict attention should be paid that functions, when done by one person or done in one section give opportunity to malversations, be spread out over different persons and preferably over different sections, under close supervision of the inspector of accounts.

10. PERSONNEL AND ADMINISTRATION SECTION

SECTION TASK DESCRIPTION

- Perform all administrative, logistical and legal steps in the hiring, promoting, rewarding, reprimanding, sanctioning, retiring and laying-off processes
- Keep personnel and retiree records up-to-date
- Monitor the personnel establishment and propose new hirings, promotions and transfers and advise management on this
- Prepare period allowances statements
- Prepare, type and file all correspondence
- Assist with-, register and guide the new customer application process
- Assist management with section-report collection, -filing, -analysis and -processing as preparation for consultation and meetings

WORK CONDITIONS

- Working hours: 7.30 a.m.- 2.30 p.m.
- Six working days per week

ESTIMATED WORK LOAD

- A. Up-keep of salary group-, wage-, allowance- and after-service benefit information (2 hours/day) and explain these to individual staff members (4 hours/day)
- B. Preparation of paperwork for retirements (temporarily catch-up work on setting-up administration system for salary deductions, etc. Previously this has been done in Fasher)
- C. Checking conformance with NUWC personnel establishment system and actions for compliance

- D. Registration of all types of leave and administration of transportation allowances for leaves (15 per month - max 40); this applies to staff recruited in other towns
- E. Assistance to applicants for water connection and processing of these applications (20 applications/month)
- F. Registration of letters , in & out (300-350 per month) and internal (150 per month); registration of duty travel
- G. Typing work (200-300 letters/month)
- H. Filing work
- I. Letter writing
- J. Assistance to chief water engineer on section report collection, -filing, and -summarizing; developing agendas for meeting and minute writing (executive office management)
- Through ISMDP, the section has received two new type-writers and an electric/manual duplicator

TARGET SETTING

- | |
|---|
| <ul style="list-style-type: none"> - (A) is close to a full time position - (B) can be combined with another task, once the system set-up is completed) - (C) can be combined with supervision (which it actually is) - (D) can be combined with e.g. with (H) - (E) can be combined with (F) (which it actually is) - (H), (I) and (J) are all full-time positions |
|---|

STAFF REQUIREMENT

- | |
|--|
| <ul style="list-style-type: none"> - It follows from the target setting that eight persons are required in this section (7 + 1 for taking on tasks of absent staff) |
|--|

STAFF PRESENT (August 1993)

- 2 personnel supervisors (one performs now some of the tasks of the manager of support services)
- 6 senior clerks
- 3 clerks

LOAD ON STAFF

- As long as the position of manager of support services is vacant, the load is 70% (otherwise 64%)

ORGANIZATIONAL STRUCTURE (actual)

- The chief of the section reports to the manager of support services
- All other section staff reports to the chief of the section (personnel supervisor)

ISSUES

- The actual human resources management process is guided by the "personnel establishment" instructions that have been developed in the remote past and did not receive the necessary up-dating that could be achieved with feedback from the branch operations
- The personnel establishment for Nyala indicates that 289 staff may be employed in Nyala. If staff would be increased till this level, it would not only create a structural financial deficit but would also reinforce the already existing over-staffing situation
- ISMDP has introduced a personnel evaluation system which, when filled in objectively and kept up-to-date regularly, can point at the most appropriate internal candidate for occurring vacancies. Although this system is designed to distinguish between competencies and other characteristics of the present staff, almost everyone is in the top of the grading system
- A system of job descriptions has equally been introduced,

but has to be filled in more precisely and needs regular updating

- ISMDP has provided Human Resource Management- and other organizational training for many of the staff of this section

CONCLUSION

- The actual staffing of Nyala consists of about 200 employees, of which 15 are assigned to other towns or non-NUWC duties. This sectional analyses reveals that only about 135 employees are required to perform all duties as defined by now, and allowing for back-up during absences.
- The section is overstaffed by three people if the catch-up work will have been completed.
- The personnel group should help the chiefs of other sections to fill-in the personnel evaluation forms more objectively.
- With the help if these data, the group should select personnel for internal transfers and promote transfers to other towns

OPTIONS FOR CHANGE

- As the "personnel establishment" system is not anymore an adequate guide for the determination of the staffing requirements, it needs replacement by a logical approach to decide how the optimal staffing situation can be reached. This documents provides a method.
- If the training to staff all sections has proved to be useful, NUWC should continue to organize training from their own resources.

11. PURCHASING AND STORES SECTION

SECTION TASK DESCRIPTION

- To supply NUWC Nyala, in a timely manner and at reasonable costs, with the necessary goods, of adequate quality, for the execution of the corporation's tasks
- Provide the corporation with information on availability, purchasing conditions and prices of these goods
- To store the goods, which are not immediately put in use, in a well organized safe location for direct retrieval on authorized demand
- Keep adequate records of the stored goods and their distribution, and of the history of previous acquisitions and their supply conditions

WORK PROCEDURES

- Assist the requisitioners with the preparation of the purchase order request
- Visit potential suppliers and collect pro-forma invoices as preparation for the purchase decision
- Organise the necessary paperwork, check preparation for the purchase and transportation
- Organise or make the purchase and check conformity with the requirements
- Deliver or check delivery to the user
- File documents for own record keeping, and deliver invoices and bills of reception to the general accounts section
- Organise safe storage of stocks and supplies
- Issue from the stock on authorized demand, monitor the stock level and organise re-supply
- Keep accurate records of stock movements

WORK CONDITIONS

- Working hours: 7.00 a.m. - 2.00 p.m.
- 6 days a week
- 70 till 90 hours of overtime is paid

ESTIMATED WORK LOAD

- Average of three to four purchases a week
- Apart from fuel, lubricants and asbestos pipe most stocks are hardly current and thus require little work
- Average of 5 - 7 fuel- or lubricant issuings each week
- Soon inventory of project store and Toyota spare part stock will be added to the section's responsibility

TARGET SETTING

- Assist with filling of purchase order request on day of first contact with requisitioner
- Obtain pro-forma and approval within one working day
- Obtain signed check within two working days and make purchase within 24 hours
- Keep perfect records

STAFF REQUIREMENT

- The number of transactions are very low
- As the role that the storekeeper plays is crucial for the work progress in many other sections, two storekeepers are required
- One storekeeper assistant or labourer is needed mainly for fuel handling

STAFF PRESENT (August 1993)

- 3 storekeepers (one on long term unpaid leave)
- 1 storekeeper assistant
- 3 labourers (of which two are casual labourers)

LOAD ON STAFF

- As there is only constant work for one storekeeper and not even a labourer for half the time, the load on the staff is 1.5/7 or 15%

ORGANIZATIONAL STRUCTURE (actual)

- The most senior storekeeper reports to the manager of support services
- All other staff reports to this most senior storekeeper

ISSUES

- The section has not been able to serve the other sections promptly as check preparation by the general accounts section take very long
- The Toyota spare part stock should be kept in the store close to the garage
- Distribution from the former project store should be scheduled to once a day

CONCLUSION

- The section should have a bicycle for most visits to suppliers and the former project store, thereby reducing the need for transport by vehicle
- The weakest link in the quality of service lays outside the section in the general accounts section

- The staff in the section can immediately be reduced to three hereby increasing the load on the staff from 15 to 50%
- As there is no overwork required in this section, overtime is paid for other reasons

OPTIONS FOR CHANGE

- | |
|--|
| <ul style="list-style-type: none">- Make at least one bicycle available to the section- Improve speed of service in the general accounts section- There is no need for casual labour in this section- Reduce the staff to three |
|--|

12. TRANSPORT SECTION

SECTION TASK DESCRIPTION

Drivers:

- Provide transportation on approved request
- Check normal functioning of the vehicles and report anomalies through chief driver to garage
- Inspect, clean and maintain the vehicle daily according to established guidelines

Garage:

- Perform scheduled inspection and maintenance on NUWC vehicles
- Replace defective parts

WORK CONDITIONS

- All section staff works: 6.30 a.m. - 3.00 p.m.
- 1 driver stays till 6 p.m. + 1 driver stays till 10.00 p.m.
- Overtime varies from 80 till 150 hrs per month

ESTIMATED WORK LOAD

- NUWC Nyala's five vehicles require drivers at all times that the vehicle are in running condition
- All these vehicle and eventually NUWC vehicles from nearby towns or related projects need at least monthly inspection, and up-coming maintenance and repairs
- 2 motorbikes are due to arrive soon

TARGET SETTING

- Never more than one vehicle out of use at a time

STAFF REQUIREMENT

- One more licensed driver than running vehicles (actually there are 5 vehicles)
- One of these vehicle is most of the time used and driven by the Chief Water Engineer
- One experienced mechanic and one trained assistant
- The frequency of the need for electrical repairs on vehicles is so low that more demanding work is better jobbed out to more specialized workshops in town

STAFF PRESENT (August 1993)

- 1 chief driver
- 4 drivers
- 1 mechanic
- 1 assistant mechanic (+1 from mech. maint. section)
- 2 labourers

LOAD ON STAFF

- When all vehicle are in running condition the load on the drivers is 100%
- As only a mechanic and one assistant mechanic are required the load on this team is only 2/5 or 40%

ORGANIZATIONAL STRUCTURE (actual)

- Chief driver reports to manager of support services
- Drivers and mechanics report to chief driver

ISSUES

- The mechanic will attend an advanced car mechanics course at the Min. of Labour/ILO Vocational Training Center in Nyala. An assistant mechanic of this section and an assistant mechanic of the mechanical maintenance section have recently completed a beginners course in this center.
- Recently the garage has been supplied with a basic set of new equipment, a set of handtools and a puller set by ISMDP. The equipment includes a garage jack, 8 axle stands, a large battery charger and an air compressor.
- To make use of the garage jack, first a reinforced concrete work platform is to be constructed
- Vehicles are very often used to move only one person for business purposes. A critical evaluation will reveal that the introduction of more bicycles and the two motorbikes can reduce the need to three vehicle running at one time. The staff has gotten used to get vehicle transportation for all purposes. The high running- and acquisition costs have to be carried by the payers of the water fees. These expenses are in sharp contrast with the ability of the community to bear the costs.
- ISMDP has introduced a daily car utilization form to be used collectively for all the cars and to be filled by the chief driver who dispatches the vehicles. This form provide management with valuable information to set norms for vehicle utilisation
- Unfortunately this form is not being used
- ISMDP has also introduced a vehicle inspection and repair form including a check list with all critical maintenance and care issues. Regular inspection reduces the need of replacing expensive parts and improves the readiness and reliability of the vehicles
- Also this form, although introduced more than one year ago, is not in use

CONCLUSION

- Although the means (especially for vehicles and fuel) are very limited in this country, it must be concluded that the utilization is far too generous at the community's expense
- Vehicle care is at a very low level and hardly any attention is paid to efforts to obtain a long reliable life out of vehicles and to prevention of high repair costs
- Serious attention by top management can reduce the costs of transportation by allowing only unavoidable vehicle utilization and by greater control over the care that is given to the vehicle fleet
- Savings can contribute to improved water service to the community

OPTIONS FOR CHANGE

- Insistence on performing regular check-ups guided by checklists.
- Strict control over vehicle utilization
- Strict control over vehicle care and maintenance

13. SECTION GENERAL (GUARD AND MESSENGER SERVICES)

SECTION TASK DESCRIPTION

Guards:

- Check on all people- and goods movements to and from Water Corporation premises according to clearly set instructions
- Report all anomalies to designated staff or police
- Issue water to tanker at tanker filling point against delivery voucher

Messengers:

- Assist corporation staff by transmitting messages and goods

WORK CONDITIONS

- The guards work according to the watchmen schedule in 8 or 12 hour shifts
- Overtime according to length of shifts
- All messengers are casual labourers, work from 7.30 a.m. till 2.30 p.m. and receive overtime

ESTIMATED WORK LOAD

- For guards: not relevant
- For messengers: low work load
- 4 extra guards are available in case of leave and sickness

TARGET SETTING

- Permanent presence on posts and appropriate action when required

STAFF REQUIREMENT

- Watchman posts (current schedule):

NUWC compound:

NUWC gate	4	shifts of	8	hours
Store and garage	4	''	''	8 ''
Fuel store	2	''	''	12 ''

Wadi:

Karari station	2	''	''	12 ''
Savannah station	2	''	''	12 ''
Museh station	2	''	''	12 ''
Borehole 1 & 2	2	''	''	12 ''

Tanker filling point	2	''	''	12 ''
----------------------	---	----	----	-------

Engineers' house	1	''	''	x ''
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NUWC guesthouse	1	''	''	x ''
-----------------	---	----	----	------

Supervision	2	''	''	x ''
-------------	---	----	----	------

On reserve	4			
------------	---	--	--	--

Total requirement: 28 (at present schedule)

Messengers:	3			
-------------	---	--	--	--

STAFF PRESENT (August 1993)

- Guards:

Senior observer	1
Observer	1
Other permanent watchmen	17
Semi-permanent	3
Casual watchmen	6

Total 28

- Messengers:	3			
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LOAD ON STAFF

- If present schedule is maintained staffing is just right

ORGANIZATIONAL STRUCTURE (actual)

- The chief of section (senior observer) reports to the manager of support services (in absence of MSS to the personnel supervisor)
- All the guards report to the chief of section

Senior observer



All the watchmen

- The observer assists the senior observer and replaces him when necessary
- The messengers report to the personnel supervisor

ISSUES

- In 1993 a brick wall around the NUWC compound has been completed, lighting has been improved and only one gate is in use
- As discussed under "OPERATIONS SECTION" there is a potential of locking one or more remote stations, which would also make the watchman (men) redundant
- Borehole nr. 1 & 2 need to be guarded as people can fall in and throw dirt inside. Adequate steel covers with padlocks eliminate the need for a guard
- If the valve chamber at the tanker filling point will be locked, this point will only need an attendant during opening hours
- As the NUWC is always attended by cooks or resident accountants there is no need for a watchman

- Many watchmen make 12 hours shift and receive a considerable amount of overtime
- It has been observed that during the last 12 months many posts has occasionally been unguarded

CONCLUSION

- For the current schedule the section is adequately staffed
- There is much room for reduction of the objects to guard
- Discipline of watchmen has to be improved
- Two messengers should suffice

OPTIONS FOR CHANGE

- The NUWC compound does require only one guard at the gate and one patrol as soon as the fuel store is adequately lighted. The patrol is not necessary during working hours
Savings: 3 watchmen
- Locking of valve chamber of the tanker filling point:
Savings: 1 watchman
- Locking of one or more remote stations. Savings: 2 or 3 watchmen per station
- Covering of the open wells. Savings: 2 watchmen
- Eliminating guard service from NUWC guesthouse (accountants residence). Savings: 1 watchman
- Total savings: about half of the guards, so also reserve can be reduced to two
- More frequent inspection of watchmen is indispensable; sanction unauthorized absence
- Try two instead of three messengers

ANNEX B

**INSTITUTIONAL CAPABILITY
INDEX**

Scoring of the institutional capability index

1 The 12 dimensions that jointly make up the Index are all "scored" on a (five points) scale from "very good" via "fair" to "very poor". The scores are calculated from the scores of the underlying indicators, as described in the next section. The score for each dimension is in fact the average of the various indicators for that dimension. So this score has a numerical value and one could use these to one overall score for institutional capability. This assumes that all dimensions are equally important and accordingly have the same "weight". But is doubtful whether such a figure represents a meaningful concept. The importance of the index lies in its constituent dimensions, not in an artificially derived figure

2 The index can be represented as follows

	VC	G	F	P	VP
	+2	+1	0	-1	-2
1 Technological soundness			.		
2 Needs assessment		.			.
3 Service delivery					.
4 Ability to relate to consumers	..	.	.	.	.
5 Administrative capability					.
6. Financial management			.		
7 Organisational soundness		.			..
8 Human resource development				..	.
9. Economic soundness		.	.	.	.
10 Linkage capability		.	.	.	..
11 Networking capability		..	..	..	..
12 Learning capability			.	.	.
OVERALL INSTITUTIONAL CAPABILITY	.	.	.	.	.
	+2	+1	0	-1	-2
	VC	G	F	P	VP

The index can be refined by making further distinctions, introducing more than dimensions or weighing the various dimensions. It can also be made simpler by leaving out certain dimensions

Indicators per dimension

1 Underlying each dimension is a set of detailed indicators. Some of these can be scored in an unambiguous quantifiable way (e.g. % of private connection holders actually paying or proportion of external subsidy to the total budget). Others need an expert judgement in terms of quantity (e.g. ratio present tariff to actual recurrent costs) or quality (e.g. timeliness of planned construction). Other indicators reflect entirely qualitative dimensions e.g. the availability of reliable key information to management. The indicators have sufficient flexibility to take such differences into account. And again the importance of this Index does not lie in exact and final quantification, but in the ability to assess and understand tendencies in the organisation's development

2 As noted above, the various dimensions are broken down in a number of specific indicators. Each indicator can be scored on a five point scale, ranging from Very Good via Fair to Very Poor. Obviously the meaning of these categories differs for each indicator and has to be set for the NUWC as it presently exists

3 The simplest (and recommended) manner for converting the scores on the indicators into a composite score for the involved dimension is by assigning numerical values of +2 and +1 for very good and good, 0 for fair and -1 and -2 for poor and very poor. With that the scores will come to a total, which can then be converted to one score between very good and very poor so that dimension by simply dividing the total by the number of indicators used for that dimension. This number varies between 7 and 13 and is in itself entirely arbitrary. It only represents the number of useful and valid indicators. It will increase when new indicators are added or reduced when indicators are dropped because they are not practical or meaningful. As long as the totals per dimension are divided by the used number of indicators the final score for that dimension will always be a figure between +2 and -2. This is, of course, the average value of the scores for the indicators used for that dimension

4 Below the first series of indicators for each of the 12 distinguished dimensions are given. This is based upon our present understanding of the Nyala NUWC and reflects what appear to be operational and meaningful manifestations of each dimension. For most indicators the 5 point scale can be used without complications, for some an additional step is required, determining what number, percentage or portion represents very good, good, fair, poor or very poor. In such cases a suggestion is included

1. TECHNOLOGICAL SOUNDNESS

VG G F P VP
+2 +1 0 -1 -2

- 1 1 Frequency of breakdown of equipment
- 1 2 Availability of heavy equipment to NUWC
- 1 3 Appropriateness of designs in professional terms
- 1 4 Quality of construction work by NUWC
- 1 5 Skills levels staff in relation to tasks
- 1 6 Ability to monitor and control quality of contractors' work
- 1 7 Impact of non-technical and non-economic factors on investments
- 1 8 Compliance construction with designs
- 1 9 Reliability of main sources of energy
- 1 10 Operation's compliance with safety margins for system

OVERALL SCORE FOR TECHNOLOGICAL SOUNDNESS. TOTAL DIVIDED BY 10-

2 NEEDS ASSESSMENT

- 2 1 Access to relevant information on source, demography etc.
- 2 2 Ability to rank needs systematically
- 2 3 Ability to set priorities
- 2 4 Presence of and adherence to water development plans
- 2 5 Selection of new schemes based on social needs
- 2 6 Availability of data on water usage
- 2 7 Availability on willingness to pay for water

TOTAL SCORE FOR NEEDS ASSESSMENT CAPABILITY: TOTAL DIVIDED BY 7-

3. SERVICE DELIVERY

- 3 1 scope of present coverage (portion of people supplied)
>80%-very good 80%-60%-good 60%-40%-fair 40%-20%-poor <20%-very poor
- 3 2 Geographical spread (portion of town covered)
- 3 3 Technological diversity (in terms of prod and distr systems)
- 3 4 Continuity of service delivery (nr and duration of breakdowns)
- 3 5 Investment costs per consumer
- 3.6 Quantity of water delivered per consumer
>25 l p d-very good 20-25-good 15-20-fair 15-10-poor <10-very poor
- 3 7 Production costs per unit delivered
(To be determined in comparison with other supply systems in Sudan)
- 3 8 proportion of Overhead costs to other expenses
(ratio fixed costs to variable costs)
- 3 9 Regularity testing of water quality
- 3 10 Portion of water not accounted for
<5%-very good 5%-10%-good 10%-15%-fair 15%-20%-poor >20%-very poor

TOTAL SCORE FOR SERVICE DELIVERY; ABOVE TOTAL DIVIDED BY 10-

4 ABILITY TO RELATE TO CONSUMERS

- 4 1 Frequency and quality of liaison with (new) kiosks committees
- 4 2 Frequency and quality of liaison with (old) kiosks leasers
- 4 3 Relationship with institutional consumers
- 4 4 Relationship with major suppliers
- 4 5 General awareness of value of safe water
- 4 6 General appreciation of NUWC's performance
- 4 7 Willingness to pay among private consumers
- 4 8 Willingness to pay among kiosks users
- 4 9 Willingness to pay among institutional consumers
- 4 10 Responsiveness of NUWC to complaints and clients
- 4 11 Presence of plans to improve customers relationships
- 4 12 Relationships NUWC to media
- 4 12 Presence of P R Officer

TOTAL SCORE ABILITY TO RELATE TO CONSUMERS: TOTAL DIVIDED BY 12-

5 ADMINISTRATIVE CAPABILITY

- 5 1 Completeness and correctness of organisational data
- 5 2 Availability of key data to management
- 5 3 Appropriateness and timeliness of internal reports
- 5 4 Regularity and quality of external reports
- 5 5 General availability and reliability of data within organisation
- 5 6 Quality and application of record keeping systems
- 5 7 Retrievability of records
- 5 8 Routine usage of internal reports
- 5 9 Use of M I S

TOTAL SCORE FOR ADMINISTRATIVE CAPABILITY: TOTAL DIVIDED BY 9-

6 FINANCIAL MANAGEMENT

- 6 1 Quality of bookkeeping and accounting procedures
- 6 2 Timeliness and completeness of budgeting exercise
- 6 3 Degree of financial control by management
- 6 4 Availability of financial reports to management
- 6.5 Propriety of financial management
- 6 6 Timeliness of payment to creditors
- 6 7 Amount of money due to NUWC in proportion to monthly budget
- 6 8 Timely receipt of external funds (GOS, donors)
- 6 9 Correctness of financial estimates
- 6 10 Ability to anticipate price escalation and inflation

TOTAL SCORE FINANCIAL MANAGEMENT TOTAL DIVIDED BY 10-

7. ORGANISATIONAL SOUNDNESS

- 7 1 Frequency and severity of individual labour problems
- 7 2 Frequency and severity of major collective disputes
- 7 3 Stability of key staff
- 7 4 Turn-over of staff
- 7 5 Presence and use of Management Information System
- 7 6 Proportion of all posts vacant
- 7 7 Proportion of top posts vacant
- 7 8 Professional criteria used in recruitment and selection
- 7 9 Utilisation of performance criteria in promotions
- 7 10 Degree of functional decentralisation in organisation

TOTAL SCORE FOR ORGANISATIONAL SOUNDNESS TOTAL DIVIDED BY 10-

8 HUMAN RESOURCES DEVELOPMENT

- 8 1 Presence and functioning training department/officer
- 8 2 Presence of and adherence to technical training programme
- 8 3 Presence of and adherence to managerial training programme
- 8 4 Presence of and adherence to financial training programme
- 8 5 Presence of career planning system
- 8 6 Promotion on performance
- 8 7 Presence of incentive-systems related to performance

TOTAL SCORE HUMAN RESOURCES DEVELOPMENT TOTAL DIVIDED BY 7-

9 ECONOMIC SOUNDNESS

- 9 1 Ratio local revenue to recurrent costs
- 9 2 Dependency on GOS subsidies for recurrent costs
- 9 3 Generation of funds for O&M
- 9 4 Generation of funds for preventive maintenance
- 9 5 Generation of funds for recapitalisation
- 9 6 Dependency on outside funds for capital investment
- 9 7 Proportion of private users actually paying invoiced amounts
>90%-very good 90%-70%-good 70%-50%-fair 50%-30%-poor <30%-very poor
- 9 8 Proportion of institutional consumers paying invoiced amounts
As above
- 9 9 Proportion of payment for used water by new kiosks
>90%-very good 90%-80%-good 80%-70%-fair 70%-60%-poor <60%-very poor
- 9 10 Proportion of payment for used water by old kiosks
As above
- 9 11 Ratio unit price invoiced to private consumers to production
price per unit
- 9 12 Ratio unit price invoiced to institutional consumers to
production price per unit
- 9 13 Ratio unit price invoiced to new kiosks to cost price per unit
- 9 14 Ratio unit price invoiced to old kiosks to cost price per unit
- 9 15 Ability to adjust prices against inflation and escalation
of costs

TOTAL SCORE ECONOMIC SOUNDNESS TOTAL DIVIDED BY 15-

10 LINKAGE CAPABILITY

- 10 1 Ability to obtain goods from outside Nyala
- 10 2 Ability to import goods
- 10 3 Quality of relationships with main suppliers
- 10 4 Collaboration and resource sharing with public institutions
- 10 5 Collaboration and resources sharing with private institutions
- 10 6 Relationship with Nyala municipality
- 10 7 Use of data from outside NUWC
- 10 8 Active use of Public Relations techniques
- 10 9 Public Relations being a designated task
- 10 10 Ability to mobilize resources from Khartoum NUWC
- 10 11 Ability to influence relevant decisions at Khartoum HQ
- 10 12 Ability to influence relevant decisions at State level
- 10 13 Ability to influence policies relevant to NUWC
- 10 14 General reputation of NUWC

TOTAL SCORE LINKAGE CAPABILITY TOTAL DIVIDED BY 14-

11 PLANNING CAPABILITY

- 11 1 Presence of and adherence to long term plans
- 11 2 Presence of and adherence to annual plans
- 11 3 Allocation of major resources according to plans
- 11 4 Ability to monitor output against plans
- 11 5 Access to external resources according to plan
- 11 6 Timeliness of completion construction

TOTAL SCORE PLANNING CAPABILITY: TOTAL DIVIDED BY 6-

12 MONITORING AND LEARNING CAPABILITY

- 12 1 Completeness and timeliness of reporting
- 12 2 Presence and use of M I S
- 12 3 Remedial action in case of mal-performance individuals or sections
- 12 4 Presence of instruments for assessing how much water produced,
distributed, paid on a regular basis
- 12 5 Procedure for leakage detection and remedial action
- 12 6 Ability to measure actual performance against overall targets
- 12 7 Presence and significance of professional discussion within NUWC
- 12 8 Ability and willingness to revise organisational procedures
- 12 9 Flexibility on organisational arrangements
- 12 10 Operational independence from state and national level
- 12 11 Openness to experiment
- 12 12 Openness to outside comments and suggestions
- 12 13 Ability to learn and improve

TOTAL SCORE LEARNING CAPABILITY TOTAL DIVIDED BY 13-

ANNEX C

ACCOUNTING FORMS

PROPOSED FORMAT FOR THE DAILY STATEMENT OF CASH COLLECTION

Receipt No.	Name of payee	Code/ Index No.	Total amount	Waterbill						Deposits	Reconn. fees	Fines/ Penalties	Installing/ repair meters	Stamp duty	Others	
				Private conn.	Gov. Instt.	Tankers	Industr / comm.conn.	Kiosks	Kiosks WSEP						Amount	Acc. No
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
Total																

Cashier,
Date:

Checked and approved,
Chief accountant,
Date:

Posted to
Cash book – Receipts,
Date:

Remarks.

- (5) + (6) + (7) + (8) + (9) + (10) + (11) + (12) + (13) + (14) + (15) + (16) = (4)
- all transactions not recorded in the columns (5) to (15) will be recorded in column (16) – Amount and column (17) – Account No. of the account to be credited.

PROPOSED FORMAT FOR THE DAILY STATEMENT OF CHEQUES RECEIVED

Receipt No	Name of payee	Code/ Index No	Cheque No	Total amount	Waterbill						Deposits	Reconn fees	Fines/ Penalties	Instaling/ repair meters	Bank charges	Stamp duty	Others	
					Private conn	Gov Instit	Tankers	Industr / comm conn.	Kiosks	Kiosks WSEP							Amount	Acc No.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
				Total														

Casher,
Date

Checked and approved,
Chief accountant,
Date

Posted to
Cash book - Receipts,
Date:

Remarks

- (6) + (7) + (8) + (9) + (10) + (11) + (12) + (13) + (14) + (15) + (16) + (17) + (18) = (5)
- all transactions not recorded in the columns (6) to (17) will be recorded in column (18) - Amount and column (19) - Account No of the account to be credited

PROPOSED FORMAT FOR THE CASH BOOK – RECEIPTS

Date	Receipt No		Cash/ Cheq.	Total amount	Waterbill					Deposits	Reconn fees	Fines/ Penalties	Installing/ repair meters	Bank charges	Stamp duty	Others		
	From	To			Private conn.	Gov. instt.	Tankers	Industr./ comm.conn.	Kiosks							Kiosks WSEP	Amount	Acc. No.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Total																		

Cashier,
Date:

Checked and approved,
Chief accountant,
Date:

Posted to General Ledger,
Date:
Ref. no.:

Remarks:

- (6) + (7) + (8) + (9) + (10) + (11) + (12) + (13) + (14) + (15) + (16) + (17) + (18) = (5)
- all transactions not recorded in the columns (6) to (17) will be recorded in column (18) - Amount and column (19) - Account No. of the account to be credited.

PROPOSED FORMAT FOR WEEKLY REPORTING OF RECEIPTS

Category of receipts (1)	Sa		Su		Mo		Tue		Wed		Thu		Total	
	No. (2)	Amount (3)	No. (4)	Amount (5)	No. (6)	Amount (7)	No. (8)	Amount (9)	No. (10)	Amount (11)	No. (12)	Amount (13)	No. (14)	Amount (15)
1. Private connections														
2. Gov. institutions														
3. Tankers														
4. Industrial/comm connections														
5. Kiosks														
6. Kiosks (WSEP)														
7. Sub - total														
8. Deposits														
9. Reconnection fees														
10. Fines/ penalties														
11. Installation/repair meters														
12. Bank charges														
13. Stamp duty														
14. Others														
15. Total														
16. Cumulative total since 1st of last month														
17. Cumulative total since 1st of new month														
18. Theoretical receipts from 1st of month														

Cashier,
Date:

Checked and approved,
Chief accountant,
Date:

Remarks:

- 1 + 2 + 3 + 4 + 5 + 6 = 7
- 7 + 8 + 9 + 10 + 11 + 12 + 13 + 14 = 15
- (2) + (4) + (6) + (8) + (10) + (12) = (14)
- (3) + (5) + (7) + (9) + (11) + (13) = (15)

PROPOSED FORMAT FOR MONTHLY REPORTING OF RECEIPTS

No.	Category of receipts	Up to last month	This month	Up to this month	Budget 19....
(1)	(2)	(3)	(4)	(5)	(6)
1.	Private connections				
2.	Gov. institutions				
3.	Tankers				
4.	Industrial/ comm. connections				
5.	Kiosks				
6.	Kiosks (WSEP)				
7.	Sub-total				
8.	Deposits				
9.	Reconnection fees				
10.	Fines/ penalties				
11.	Installation/ repair meters				
12.	Bank charges				
13.	Stamp duty				
14.	Others				
15.	Total				

Cashier,
Date:

Checked and approved,
Chief accountant,
Date:

Remarks:

- (3) + (4) = (5)
- 1 + 2 + 3 + 4 + 5 + 6 = 7
- 7 + 8 + 9 + 10 + 11 + 12 + 13 + 14 = 15

Posted to General Ledger,
Ref. no.:
Date:

PROPOSED FORMAT FOR THE CASH AT BANK BOOK – EXPENDITURES

P O. No	Date	Cheque No.	Details/Nature of expenditure	Total amount	Analysis of expenditures / Acc. No.										Others	
					(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	Amount (16)	Acc. No. (17)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
TOTAL																

Cashier,
Date

Checked and approved,
Chief accountant,
Date

Posted to General Ledger,
Ref no
Date

Remarks

- (6) + (7) + (8) + (9) + (10) + (11) + (12) + (13) + (14) + (15) + (16) = (5)
- columns (6) to (15) to be used for the most regularly used expenditure accounts
- all transactions not recorded in the columns (6) to (15) will be recorded in column (16) – Amount and column (17) – Account No. of the account to be debited

FORMAT OF LEDGER PRESENTLY IN USE FOR CUSTOMER ACCOUNTS

Reg. No.	Name	House		Connection sheet		Disconn. sheet		Outst. from previous month	Credits				Arrears	
		No.	Block	No.		No.			Date	Receipt No.	Cash		Allowances	

Reading meter		Tariff				Tariff two			Charges		Other charges 6-5	Total charges	Remarks
Previous	Present	Consumption	Fst	Sst	Thst	Charges 34		Charges					

PROPOSED FORMAT FOR LEDGER / LOOSE - LEAF E CARDS FOR CUSTOMER ACCOUNTS

Area Code / Index No		Name:										Pipe size Meter functioning Y / N Flat rate/ month Tariff/ m3									
Month	Outstanding balance beginning this month					Charges this month				Other charges			Allowances/ deductions			Payments received			Balance end this month	Remarks	
	>3months	2-3 months	1-2 months	last month	total	Meter reading		(Est.) cons. in m3	Tariff	Total this month	Ref	Date	Amount	Ref.	Date	Amount	Receipt No.	Date			Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
					Total																

Remarks

- (2) + (3) + (4) + (5) = (6)
- (7) - (8) = (9)
- (9) x (10) = (11)
- (6) + (11) + (14) / (17) / (20) = (21)
- Payments received will always be credited to the longest outstanding balance
- Column (21) to be specified agewise in records of next month

WEEKLY REPORTING OF COLLECTION DATA - WSEP KIOSKS

COLLECTION DATA FOR THE WEEK FROM .../.../... to .../.../...

	1st meter reading	2nd meter reading	m ³ pumped	hours pumped
Sat				
Sun				
Mon				
Tue				
Wed				
Thu				
Fri				
Totals			m ³	hrs.

(A) revenue from kiosks for this week (See Annex: ...kiosks)	£S
--	----

(B) bulk meter reading at beginning of week	m ³
---	----------------

(C) bulk meter reading at end of week	m ³
---------------------------------------	----------------

(D) m ³ pumped: C - B	m ³
----------------------------------	----------------

(E) 10% physical loss: 0.1 x D	m ³
--------------------------------	----------------

(F) theoretical quantity sold at kiosks: D - E	m ³
--	----------------

(G) theoretical number of jouz sold at kiosks: (1000/40) x F = 25 x F	jouz
--	------

(H) theoretical income from kiosks: price/jouz x G = £S .../jouz x G	£S
---	----

(I) collection efficiency: $\frac{A}{H} \times 100\%$	%
--	---

Observations for the week:

ANNEX to COLLECTION DATA
FOR THE WEEK FROM:.....TO:

Revenue collected:

Kiosk No.	Amount received	Remarks
(1)	(2)	(3)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
TOT		

Cashier, Date:	Checked and approved, Chief accountant, Date:
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PROPOSED FORMAT FOR MONTHLY REPORTING OF CONSUMER ACCOUNTS

No	Description	Private connections / Area									Gov Instt	Tankers	Industr / Comm. conn.	Kiosks	Kiosks (WSEP)	Total
		(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	Total (11)						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1	Outstanding balance beginning this month															
	> 3 months															
	2 - 3 months															
	1 - 2 months															
	last month															
2	Sub - total															
3	Charges this month															
	water bills															
	other charges															
4	Sub - total															
5	Allowances / deductions															
6	Sub - total															
7	Payments received															
8	Balance end this month															
9	Agewise schedule of balance end this month															
	>3 months															
	2 - 3 months															
	1 - 2 months															
	last month															
	total															

10	No. of registered connections:	End Last month	New conn.	Dis-conn.	Re-conn	End this month
(18)	(19)	(20)	(21)	(22)	(23)	(24)
A	Private connections					
B	Gov. institutions					
C	Tankers					
D	Industrial/comm connections					
E	Kiosks					
F	Kiosks (WSEP)					
	Total					

Drawn up by Date ..	Charges this month (3) and allowances/deductions (5) posted to the General Ledger, Date .. Ref.no ..
Checked and approved. Chief accountant, Date ..	

Remarks

- 2 + 3 = 4
- 4 / 5 = 6
- 6 / 7 = 8
- 9 total = 8
- (3) + (4) + (5) + (6) + (7) + (8) + (9) + (10) = (11)
- (11) + (12) + (13) + (14) + (15) + (16) = (17)
- (20) + (21) / (22) + (23) = (24)

PROPOSED FORMAT FOR PAYROLL SUMMARY SHEET

No.	Cost Centre/ Description	Management and administration 100	Accounts 200	Water production 300	Water distribution 400	Transportation 500			Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Basic salary								
2	Overtime								
3	Allowances								
4	Transportation allowances								
5	Total gross pay								
	<u>Deductions:</u>								
6	Income tax								
7	Co-op shop/society								
8	Staff loans								
9	Sale of stores								
10	House rent								
11	Fines/ penalties								
12	Pension fund								
13	Alimony								
14	Health tax								
15	Social insurance								
16	Labour union								
17	Stamp duty								
18	Water bills								
19									
20									
21	Total deductions								
22	Total net pay:								
	- by cash								
	- by bank								
	- total								
23	Paysheet(s) ref no.								
24	No. of employees								

Drawn up by:
Date:

Checked and approved,
Chief accountant,
Date:

Posted to General Ledger - payroll
control,
Date:
Ref. no.:

20x	<u>Stocks and stores</u>	C	323	Health tax	
			324	Social insurance fund	
			325	Labour union	
201	Fuel and lubricants				
202	Building materials		330	<u>Accrued expenses</u>	
203	Stationeries				
204	Chemicals		34x	<u>Other liabilities</u>	
205	Spare parts vehicles				
206	Water meters		341	Co-op shop/ society	
207	Parts production and distribution system		342	C/a alimony	
			343	Stamp duty	
208	Electrical equipment		350	Payroll control account	
209	Other consumable stores				
			4xx	<u>Other liabilities</u>	
220	<u>Cash in hand</u>				
			401	Deposits by customers	F
22x	<u>Cash at bank</u>				
			5xx	<u>Capital</u>	
221	Bank of Sudan, acc no.				
222	Unity Bank, acc.no		501	Capital	
223	Unity Bank, acc no.		502	Capital - grants	
			503	Capital - loans	
23x	<u>Debtors and prepayments</u>	D			
			B	<u>PROFIT AND LOSS ACCOUNT</u>	
231	Accounts receivable - Private connections				
232	Accounts receivable - Gov institutions		7xx	<u>Cost accounts</u>	
233	Accounts receivable - Tankers				
234	Accounts receivable - Ind/comm. connections				
235	Accounts receivable - Kiosks				
236	Accounts receivable - Kiosks (WSEP)		701	Salaries - management and supervisory staff	
			702	Salaries - admin, clerical and accounting staff	
238	Prepayments and deposits		703	Salaries - skilled labour	
239	Provision for bad and doubtful debts		704	Salaries - unskilled labour	
			705	Wages	
24x	<u>Staff personnel accounts</u>	E			
			706	Overtime	
241	Staff loans and advances		707	Allowances	
242	Staff travel imprest		708	Transportation allowances	
243	Staff personnel accounts		707	Medical costs	
			708	Leave travel	
3xx	<u>Current liabilities</u>		709	Uniforms	
			710	Rent of staff housing	
301	Accounts payable		711	Electricity staff housing	
302	Unclaimed salaries and wages		712	Water staff housing	
	Current account with		713	Driving licenses	
	NUWC HQ Khartoum		714	Workman's compensation pay	
303	NUWC Regional/State office El Fasher		715	Social insurance - employer's contribution	
304	NUWC El Fasher		716	Pension fund - employer's contribution	
305	NUWC El Geneina		717	Education and training costs	
306	NUWC El Geneina		718	Gratuity fund	
			719	Co-op society	
32x	<u>Statutory accounts</u>		720	Duty travel	
			721	Duty travel - board and lodging	
321	Income tax				
322	Pension fund				

73x	<u>Direct operating costs</u>		792	Communication equipment
			793	Miscellaneous assets
731	Power and electricity			
732	Fuel and lubricants	8xx		Revenue
733	Water consumption			
734	Chemicals		801	Private connections
735	Other consumable stores		802	Government institutions
736	Consumable tools and instruments		803	Tankers
737	Electrical materials and equipment		804	Industr./commercial connections
738	Maintenance and repair of production system		805	Kiosks
739	Maintenance and repair of distribution system		806	Kiosks (WSEP)
740	Hire of machinery			
741	Contractor fees		81x	<u>Other income</u>
75x	<u>Maintenance and repair:</u>		810	Connection fees
			811	Connections – direct costs
751	Buildings, residential		812	Reconnection fees
752	Buildings, offices		813	Fines, penalties
753	Vehicles		814	Installation, repair, changing meters
754	Furniture and fittings– residential buildings		815	Bank charges
755	Furniture and fittings– office buildings		816	House rent charged out
756	Communication equipment		817	Allowances/ deductions granted
			818	Sales of stores
76x	<u>Other indirect operating costs</u>		819	Other income
761	Stationeries and printing			
762	Postage, telephone, telex			
763	Bank costs			SUBSIDIARY LEDGERS:
764	Running costs vehicles		A	Fixed assets register/ledger cards
765	Insurances – general		B	Work in progress ledger (specification per job number)
766	Other consumable stores		C	Stores ledgers
767	Board of Directors expenses		D	Various consumer accounts ledgers
768	Audit fees		E	Personal accounts ledgers (specification per employee)
769	Legal fees		F	Consumer accounts ledger (specification of deposit per customer)
770	Entertaining costs			
771	Local taxes and rates			
772	Advertising and publicity costs			
773	Custom charges, handling fees			
774	Freight charges			
775	Provision for bad and doubtful debts			
78x	<u>Depreciation costs:</u>			
781	Buildings, residential			
782	Buildings, offices			
783	Pumping stations			
784	Temporary structures			
785	Vehicles			
786	Production system			
787	Distribution system			
788	Tools and instruments			
789	Construction equipment			
790	Furniture and fittings– residential buildings			
791	Furniture and fittings– office buildings and pumping stator			

PROPOSED FORMAT OF MONTHLY FINANCIAL MANAGEMENT INFORMATION SHEET

Management information as per :

Account No.	Description	Up to last month	This month	Up to this month	Budget	Prop. budget
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	A. REVENUE					
801	Private connections					
802	Gov. institutions					
803	Tankers					
804	Industr./comm.connections					
805	Kiosks					
806	Kiosks (WSEP)					
	Sub-total					
81x	Other income					
	TOTAL REVENUE					
	B. COST ACCOUNTS					
701/4	Salaries					
705	Wages					
706	Overtime					
707/21	Other personnel related costs					
	Sub-total personnel costs					
731/41	Direct operating costs					
75x	Maintenance and repair					
76x/ 77x	Other indirect operating costs					
78x/ 79x	Depreciation costs					
	TOTAL COST ACCOUNTS					
	C. RESULT THIS FINANCIAL YEAR					

Drawn up by Date:	Checked and approved, Chief accountant, Date:
--------------------------------	---

Remarks.

- (3) + (4) = (5)

ANNEX to Monthly Financial Management Information Sheet

Management information as per.

Account No.	Description	Management and administration 100	Accounts 200	Water Production 300	Water production 400	Water distribution 500	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	A. REVENUE:						
801	Private connections						
802	Gov. institutions						
803	Tankers						
804	Industr / comm connections						
805	Kiosks						
806	Kiosks (WSEP)						
	Sub - total						
81x	Other income						
	TOTAL REVENUE						
	B. COST ACCOUNTS:						
701/4	Salaries						
705	Wages						
706	Overtime						
707/21	Other personnel related costs						
	Sub - total personnel costs						
731/41	Direct operating costs						
75x	Maintenance and repair						
76x/77x	Other indirect operating costs						
78x/79x	Depreciation costs						
	TOTAL COST ACCOUNTS						
	C. RESULT THIS FINANCIAL YEAR						

Drawn up by.
Date:

Checked and approved,
Chief accountant,
Date:

Remarks:

- (3) + (4) + (5) + (6) + (7) = (8)

PROPOSED FORMAT FOR MONTHLY MANAGEMENT INFORMATION SHEET
(Based on cash position only)

No.	Description	Up to last month	This month	Up to this month	Budget	Prop. budget
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Balance at the beginning of the month:					
1.1	Cash in hand					
1.2	Bank of Sudan acc. no.					
1.3	Unity Bank, acc. no.					
1.4	Unity Bank, acc. no.					
1.	TOTAL BALANCE BEGINNING OF THE MONTH					
	Receipts:					
2.1	Private connections					
2.2	Gov. Institutions					
2.3	Tankers					
2.4	Industr /comm. connections					
2.5	Kiosks					
2.6	Kiosks (WSEP)					
2.7	Other income					
2.8	Deductions on salaries and wages					
2	TOTAL RECEIPTS THIS MONTH					
	Expenditures					
3.1	Salaries (gross)					
3.2	Wages					
3.3	Other personnel related costs					
3.4	Direct operating costs					
3.5	Repair and maintenance					
3.6	Other indirect operating costs					
3.7	Others:					
3	TOTAL EXPENDITURES THIS MONTH					
4.	Balance at the end of the month:					
4.1	Cash in hand					
4.2	Bank of Khartoum, acc.no.					
4.3	Unity Bank, acc.no.					
4.4	Unity Bank, acc no.					
4	TOTAL BALANCE AT END OF THIS MONTH					
5	RETAINED RECEIPTS THIS MONTH					

Remarks

- (3) + (4) = (5)
- 1 + 2 / 3 = 4
- 4 / 1 = 5

PROPOSED FORMAT FOR QUARTERLY REPORTING ON BALANCE SHEET

Acc. no.	Description	Balance	
		End of this quarter	End of last quarter
(1)	(2)	(3)	(4)
	<u>ASSETS:</u>		
1xx– 15x	<u>Fixed assets</u>		
2xx	<u>Current assets:</u>		
20x	Stocks and stores		
220	Cash in hand		
22x	Cash at bank		
23x	Debtors and prepayments:		
231	Private connections		
232	Gov. institutions		
233	Tankers		
234	Ind./ comm. customers		
235	Kiosks		
236	Kiosks (WSEP)		
238	Prepayments and deposits		
239	Provision for bad and doubtful debts		
24x	Staff personnel accounts		
	TOTAL ASSETS		
	<u>LIABILITIES:</u>		
15x	Accumulated depreciation		
3xx	<u>Current liabilities:</u>		
301	Accounts payable		
302	Unclaimed salaries and wages		
303/6	Current accounts		
32x	Statutory accounts		
330	Accrued expenses		
34x	Other liabilities		
401	<u>Deposits by customers</u>		
5xx	<u>Capital:</u>		
501	Capital		
502	Capital – grants		
503	Capital – loans		
	TOTAL LIABILITIES		
–	RESULT THIS FINANCIAL YEAR		

PROPOSED FORMAT FOR MONTHLY CASH BUDGET

No	Description	Coming month	Coming Month+1	Coming month + 2
(1)	(2)	(3)	(4)	(5)
1.	Balance at beginning of month:			
	– Cash in hand			
	– Cash at bank:			
	. Bank of Sudan, acc. no ...			
	. Unity Bank, acc. no.			
	. Unity Bank, acc. no.			
	TOTAL BALANCE BEGIINING OF MONTH			
2	Receipts:			
	– Debtors:			
	. Private connections			
	. Gov. institutions			
	. Tankers			
	. Ind./comm connections			
	. Kiosks			
	. Kiosks (WSEP)			
	– Other income			
	TOTAL RECEIPTS			
3	Expenditures:			
	– Salaries and wages and other personnel related costs			
	– Direct operating costs			
	– Maintenance and repair			
	– Other indirect operating costs			
6	TOTAL EXPENDITURES			
4	BALANCE AT THE END OF THE MONTH			

Remarks:

– (1) + (2) / (3) = (4)

PROPOSED FIXED ASSET LEDGER CARD

FIXED ASSET LEDGER CARD

Description of asset: Supplier/ manufacturer: Brand/type: Model or serial no.: Engine no.: Chassis no.: Drawing ref.: Othewr identifying marks:	Date acquired/ completed: Estimated lofetime: .....yrs Depreciation rate: ...../yr Location: Accounts ref.: Cost data: - acquisition costs: : - freight, insurance, etc.: - other installation costs: - total costs :
---	---

DEPRECIATION

Date	Accts ref.	Period	Amount of depr.	New book value	Remarks

PROPOSED ANNUAL DEPRICIATION RATES OF FIXED ASSETS

Category of assets	Lifetime (yrs)	Annual rate of depreciation (%)
(1)	(2)	(3)
Land	N/A	—
Buildings, permanent	25	4
Buildings, temporary	3	33.3
Vehicles	4	25
<u>Production system:</u>		
– Boreholes		
– Borehole pumps	5	20
– Generators	5	20
– Power lines	10	10
– Electrical switchgear	5	20
– Overhead tanks	15	6.7
– Storage reservoirs	15	6.7
– Pipelines, fittings	20	5
<u>Distribution system:</u>		
– Booster pumps	10	10
– Pipelines, fittings	20	5
– Consumer connections	10	10
– Kiosks	10	10
Tools and instruments	5	20
Construction equipment	5	20
Office equipment	5	20
Furniture and fittings	10	10
Communication equipment	5	20
Miscellaneous assets	5	20

PROPOSED FORMAT FOR VERIFICATION OF ACCOUNTS RECEIVABLE – CUSTOMER ACCOUNTS

Area	Code/ Index No.	Name	Pipe size	Meter Y/N	Flat rate	Tariff/ m3	Last ledger update (month)	Total amount outst.	Specification of outstanding amount				Remarks
									<1 month	1-2 months	2-3 months	> 3 months	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Total													

Drawn up by:
Date :

Checked and approved,
Chief accountant,

Remarks:

- (10) + (11) + (12) + (13) = (9)

PROPOSED FORMAT FOR BANK RECONCILIATION STATEMENT

Date	Description	Amount
(1)	(2)	(3)
.....	Balance as per Cash at Bank book	.....
	<u>Add:</u>	
	Cheques not yet presented for payment:	
.....	
.....	
	Sub – total	
	<u>Deduct:</u>	
	Cheques remitted to bank for clearance, not yet cleared:	
.....	
.....	
.....	Balance as per bank statement	.....

Drawn up by : Date:
Checked and approved, Chief accountant, Date:

PROPOSED FORMAT FOR BIN CARD

BIN CARD					
Item:		Stores ledger fo.:			
Description:		Location:			
Size:		Minimum stock:			
Maker's part no.:		Unit of measure:.....			
Date	Voucher no.	IN	OUT	BALANCE	Storekeeper's initial for entry
(1)	(2)	(3)	(4)	(5)	(6)

ANNEX D

SECTION REPORTING FORMS

WHY FORMS FOR REPORTING?

- Promotes completeness
- Always in same order, so easy to compare reports from different periods
- Shorter than prose
- Once you are used to them, it takes little time to fill them
- Takes little time of manager to consult form reports
- Makes heads of departments/sections aware of what happens in their unit

WHY DAILY REPORT FORM?

- For recording in department or section itself; to prepare for weekly/monthly reporting

WHY (SOMETIMES) WEEKLY REPORTING?

- Management cannot wait one full month to be informed about what happens in the sections

WHY MONTHLY REPORTING?

- Contains all weekly reported data, but reduces the number of forms for longer periods

SECTION REPORTING FORMS

OPERATIONS SECTION

NATIONAL URBAN WATER CORPORATION NYALA - SUDAN

MONTHLY ACTIVITY REPORT

MONTH:.... 199.

OPERATIONS SECTION

Name employee:	Jobtitle:	Station:	Shift or type of absence:	Period:

INSPECTIONS MADE:

Date:	Station inspected:	Inspector:	Remarks:
			Inspector: Signed: Date:

Example how form should be used:

NATIONAL URBAN WATER CORPORATION

NYALA - SUDAN

MONTHLY ACTIVITY REPORT

MONTH:.... 199.

OPERATIONS SECTION

Name employee:	Jobtitle:	Station:	Shift or type of absence:	Period:
Abd. Ali Must.	2nd cl. P.O.	P. house	6.00 - 14.00	1/8 - 15/8
..	..	Museh	14.00- 22.00	16/8 - 22/8
..	..		sick	23/8 - 30/8

INSPECTIONS MADE:

Date:	Station inspected:	Inspector:	Remarks:

الجمعية الخيرية لنبلاء الكويت
تفسيلاً
القطر رقم ١٤٤٤

القطر رقم ١٤٤٤

المحاسبين

الفترة الزمنية	الجمعية الخيرية لنبلاء الكويت	الرقم	الرقم
MONTHLY REPORT OPERATIONS SECTION			

التاريخ

التاريخ	اسم المحاسب	الرقم
---------	-------------	-------

العاملين

الاسم	الوظيفة	المحطة	الوردية الخراب	الفترة الزمنية
جابر محمد عبد الله قحطان	رئيس فوردية	الرئيسية		١٩٧٥ ح فقه
محمد صالح الدويهي	ناشط			١٩٧٦ ح فقه
محمد طارق احمد حنين	عامل			١٩٧٦ ح فقه
الذافران محمد نصيم	رئيس فوردية			١٩٧٧ م
احمد احمد سليمان بن	ناشط			١٩٧٧ م
احمد محمد احمد حنين	عامل			١٩٧٧ م
يحيى احمد حنين	رئيس فوردية			١٩٧٨ م
احمد احمد احمد حنين	ناشط فوردية			١٩٧٨ م
احمد محمد احمد حنين	عامل			١٩٧٨ م
احمد محمد احمد حنين	ناشط فوردية			١٩٧٨ م
احمد محمد احمد حنين	عامل			١٩٧٨ م

الفتن

التاريخ	المحطة اسم الفتن	الطعنات
١٩٧٧/٧٤	الرئيسية محمد احمد حنين محمد احمد حنين	محمد احمد حنين محمد احمد حنين محمد احمد حنين محمد احمد حنين محمد احمد حنين

الاسم
الوظيفة

NATIONAL URBAN WATER CORPORATION NYALA - SUDAN

OPERATIONS SECTION

Date:.....19

BOREHOLE LEVEL RECORDING

This recording should be carried out weekly!

The starting date os to be determined by the Water Engineer, but should not be later than December 1.

Water levels in thirteen boreholes should be recorded whether there is a pump installed or not.

If pumps are in operation these should not be stopped. Write reading in meters in the appropriate column.

WATER LEVEL

Borehole or well	Pump in operation		No pump or not in operation	
	from top of casing	from ground level	from top of casing	from ground level
Pumphouse 1 Pumphouse 2 Pumphouse 3 Pumphouse 4 Pumphouse 5				
Karari 1 Karari 2 Karari 3				
Railway 1 Railway 2				
Museh 1 Museh 2 Museh 3				

All counting starts from the bridge

Recorded by:
Signature:

NATIONAL URBAN WATER CORPORATION NYALA - SUDAN

OPERATIONS SECTION

Date:.....19

BOREHOLE LEVEL RECORDING

This recording should be carried out weekly!

The starting date is to be determined by the Water Engineer, but should not be later than December 1.

Water levels in thirteen boreholes should be recorded whether there is a pump installed or not.

If pumps are in operation these should not be stopped. Write reading in meters in the appropriate column.

WATER LEVEL

Borehole or well	Pump in operation		No pump or not in operation	
	from top of casing	from ground level	from top of casing	from ground level
Pumphouse 1				
Pumphouse 2				
Pumphouse 3				
Pumphouse 4				
Pumphouse 5				
Karari 1				
Karari 2				
Karari 3				
Railway 1				
Railway 2				
Museh 1				
Museh 2				
Museh 3				

All counting starts from the bridge

Recorded by:
Signature:

STATUS OF SUBMERSIBLE PUMPS AND SWITCHBOARDS NYALA JULY 1993

PUMP	SWITCHBOARD		NORMAL AMP DRAW	PUMPING SCHEDULE

***** Pumphouse *****				
Staff: 3 shifts of 2 operators				

1. no pump	simple manual switch			
2. unknown	Grundfos	w/ampmeter	20 A	24 hours
3. Grundfos	Delta Control	w/ampmeter	9 A	(from August not between
4. Grundfos	no brand	w/ampmeter	10 A	24 - 3 hrs)
5. Grundfos	no brand			
	defective			

***** Savannah *****				
Staff: 4 shifts of 1 operator and 1 watchman				

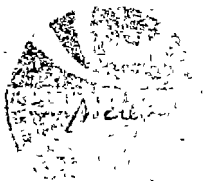
KAR1 Grundfos	Grundfos	w/ampmeter	14,2 A	24 hours
KAR2 Grundfos	Grundfos	w/ampmeter	14,2 A	(from August not between
	w/ overload signal **)			24 - 3 hrs)
KAR3	Grundfos	w/ampmeter		
no pump	w/ overload signal **)			

***** Railway *****				
Staff: 4 shifts of 1 operator and 1 watchman				

1. Grundfos 6/5	Grundfos	w/o ampmeter		24 hours
		*)		(from August not between
2. Grundfos 6/5	Grundfos	w/o ampmeter		24 - 3 hrs)
		*)		

***** Museh *****				
Staff: 3 shifts of 1 operator and 1 watchman				

1. Grundfos 6/5	Grundfos	w/ampmeter	13.5 A	24 hours
	w/ overload signal **)			(from August not between
2. Grundfos 6/5	Grundfos	w/ampmeter	13.5 A	24 - 3 hrs)
	w/ overload signal **)			
=====				
*) Indicator lamp shows when pump is under power				
**) Operator should switch off pump when overload signal is lit.				
All shifts: 6 - 14 hrs, 14 - 22 hrs and 22 - 6 hrs				
A:\work93\submpumps				
w/ : with w/o : without				



الهيئة القومية لمياه المدن - نبالا
قراءات عدادات محطة التنقية



التاريخ	عداد الاكشاك	كمية الماء المنصرف للاكشاك	عداد المدينة	الماء المنصرف للمدينة	عدد ساعات التشغيل اليومية	مجموع كمية الماء المنصرف للمدينة والاكشاك	جملة عدد ساعات التشغيل اليومية
السبت					طلبه ١ ... طلبه ٢ .. طلبه ٣ ... طلبه ٤ ..		
لاحد					طلبه ١ ... طلبه ٢ ... طلبه ٣ ... طلبه ٤ ..		
لاثنين					طلبه ١ ... طلبه ٢ .. طلبه ٣ ... طلبه ٤ ..		
لثلاثاء					طلبه ١ ... طلبه ٢ ... طلبه ٣ ... طلبه ٤ ..		
لاربعاء					طلبه ١ ... طلبه ٢ ... طلبه ٣ ... طلبه ٤ ..		
الخميس					طلبه ١ ... طلبه ٢ ... طلبه ٣ ... طلبه ٤ ..		
الجمعة					طلبه ١ ... طلبه ٢ ... طلبه ٣ ... طلبه ٤ ..		

SECTION REPORTING FORMS
MAINTENANCE SECTION

NATIONAL URBAN WATER CORPORATION

NYALA - SUDAN

MONTHLY ACTIVITY REPORT

MONTH:.... 199.

MECHANICAL MAINTENANCE SECTION

Name employee:	Jobtitle	Shift or type of absence:	Period:

REPAIRS, INSTALLATION & MAINTENANCE ACTIVITIES

Date:	Pump or object worked on:	What work done:	Materials used:	Result:

Example how form should be used:

NATIONAL URBAN WATER CORPORATION

NYALA - SUDAN

MONTHLY ACTIVITY REPORT

MONTH:.... 199.

MECHANICAL MAINTENANCE SECTION

Name employee:	Jobtitle	Shift or type of absence:	Period:
Adam Abdalla	Ass. mechanic	6.00 - 14.00	1/8-15/8
''	''	14.00 - 22.00	16/8-22/8
''	''	leave or sick	23/8-30/8

REPAIRS, INSTALLATION & MAINTENANCE ACTIVITIES

Date:	Pump or object worked on:	What work done:	Materials used:	Result:

المهنة القومية لعمياء - المدن -
قسم الدعاية للميكانيكية

التقرير الشهري ١٩٦٣م

الاسم	الوظيفة	المحطة	الوردية	الفترة الزمنية
MONTHLY REPORT MECHANICAL MAINTENANCE				

نشاط الصيانة التركيب و انتصليح

التاريخ	ما تم العمل عليه من المعدات الخ	نوع الاداة	المواد المستخدمة	النتائج

المهنة القومية لعمال المدن
 قسم الصيانة للمركبات فنية

Mohamed M. Mohamed

التقرير الشهري ١٩٩٣ م

الاسم	الوظيفة	المحطة	الوردية	الفترة الزمنية
أبراهيم أحمد محمد	مراقب	التنقيب	—	٦ ص ٦ م
محمد أحمد صنفه	مكثف	~	—	٦ ص ٦ م
محمد النبل صنفه الله	دراسة	~	—	٦ ص ٦ م
السيد عبد الكريم	مكثف	~	—	٦ ص ٦ م
محمد عبد الله محمد	دراسة	~	بدون عمل	٦ ص ٦ م
المعلمة البيلاد	م مكثف	~	—	٦ ص ٦ م
محمد زينة عيسى	عامه	~	—	٦ ص ٦ م

نشاط الصيانة التركيب والتصلب

التاريخ	ما تم العمل عليه من المعدات الخ	نوع الاداء	الضواد المستعملة	نتائج
٩٢/٩/٢٠	تغيير قن الطابوقة	صية	—	—
٩٢/٩/١٥	تركيب الفخ	صية	صم حانوس	—
٩٢/٩/١٢	تمراد لعداد المياه	صية	—	صية
٩٢/٩/١٢	صيانة الالابار	صية	—	صية

قار لعدادات المياه

محمد أحمد محمد

١٩٩٣ م

NATIONAL URBAN WATER CORPORATION

NYALA - SUDAN

MONTHLY ACTIVITY REPORT

MONTH:.... 199.

ELECTRICAL MAINTENANCE SECTION

Name employee:	Jobtitle	Shift or type of absence:	Period:

REPAIRS, INSTALLATION & MAINTENANCE ACTIVITIES

Date:	What object is worked on:	What work done:	Materials used:	Result:

Example how form should be used:

NATIONAL URBAN WATER CORPORATION

NYALA - SUDAN

MONTHLY ACTIVITY REPORT

MONTH:.... 199.

ELECTRICAL MAINTENANCE SECTION

Name employee:	Jobtitle	Shift or type of absence:	Period:
Adam Ibrahim	Elect.n 1stcl	6.00 - 14.00	1/8-15/8
''	''	14.00 - 22.00	16/8-22/8
''	''	leave or sick	23/8-30/8

REPAIRS, INSTALLATION & MAINTENANCE ACTIVITIES

Date:	What object is worked on:	What work done:	Materials used:	Result:

التقرير الشهري ٠٠٠٠٠٠٠٠ ١٩٧٣

الاسم	الوظيفة	الوردية	الخياب	الفترة	الزميلة
بنت النور	مهندسة	١٩٧٣	١٩٧٣	١٩٧٣	١٩٧٣
ابراهيم	مهندس	١٩٧٣	١٩٧٣	١٩٧٣	١٩٧٣
علاء	مهندس	١٩٧٣	١٩٧٣	١٩٧٣	١٩٧٣
الظاهر محمد	مهندس	١٩٧٣	١٩٧٣	١٩٧٣	١٩٧٣
عبد الله محمد	مهندس	١٩٧٣	١٩٧٣	١٩٧٣	١٩٧٣
داود محمد	مهندس	١٩٧٣	١٩٧٣	١٩٧٣	١٩٧٣
داود محمد	مهندس	١٩٧٣	١٩٧٣	١٩٧٣	١٩٧٣

نشاط الصيانة اسبوعيا حسب والتعليق

التاريخ	ماتم العمل عليه	نوع الاداء	المواد المستخدمة	لحسوفات
١٩٧٣/٩/١	صيانة مضخة مياه	حيد	سفن	
١٩٧٣/٩/٢	قفل انارة	حيد	لصق انارة	
١٩٧٣/٩/٣	الحمل الكهربائي	حيد	لصق انارة	
١٩٧٣/٩/٤	نظافة مضخة مياه	حيد	سفن	
١٩٧٣/٩/٥	تصليق انارة	حيد	لصق انارة	
١٩٧٣/٩/٦	تصليق انارة	حيد	لصق انارة	
١٩٧٣/٩/٧	تصليق انارة	حيد	لصق انارة	
١٩٧٣/٩/٨	تصليق انارة	حيد	لصق انارة	
١٩٧٣/٩/٩	تصليق انارة	حيد	لصق انارة	
١٩٧٣/٩/١٠	تصليق انارة	حيد	لصق انارة	
١٩٧٣/٩/١١	تصليق انارة	حيد	لصق انارة	
١٩٧٣/٩/١٢	تصليق انارة	حيد	لصق انارة	

بنت النور
مهندسة الصيانة الكهربائية
١٩٧٣/٩/١٩

SECTION REPORTING FORMS

PIPELINES SECTION

NATIONAL URBAN WATER CORPORATION NYALA - SUDAN

PIPELINES SECTION

DATE:..... 199.

PIPELINE REPAIR REPORT Time start:..... Time finish:.....

Specifications on pipeline repair:

Location (mention also house numbers of house nearest by):

.....

Kind and size of pipe repaired:.....

Reason of leak:.....

How is repair performed and what are the fittings used:

.....
.....
.....

Repair is: temporary permanent

Number of staff involved in the work:

Commander:

Chief technician:

1st class pipefitter:

2nd class pipefitter:

Pipefitter assistant:

Labourers:

Name of person in charge of the group:

His signature:

بسم الله الرحمن الرحيم

الهيئة القومية لمياه المدن / قسم / نيالا

§ // § //

تسليان موقع واصلاح الكسور بعديفة / نيالا

التاريخ /

بين موقع الكسور بالعديفة / §

نوع الماسورة الكسورة وحجمها / §

سبب الكسور / §

كيف تم اصلاح الكسور واللوازم المستخدمة / §

الفرقة التي اجرت عملية الاصلاح / §

كمد / §

وثيمر / §

براد درجة اولى / §

براد درجة ثانية / §

مسامد / §

مصال / §

اسم قائد الفرقة / §

توقيع قائد الفرقة / §

توجه // ١٥٥

PIPELINE REPAIR FORM

PIPELINES SECTION

DATE:..... 199.

INVESTIGATION OF VALVE CHAMBER STATUS

Area:..... Closest house nr.:.....

CHAMBER	Length	Width
Outside dimension	... cm	... cm
Inside dimension	... cm	... cm

VALVES	(1)	(2)	(3)
Type of valve installed	...	...	...
Pipe diameter	...	...	...
Handle present	Y/N	Y/N	Y/N
Valve in need of repair	Y/N	Y/N	Y/N

Quantity of dirt to be removed:	... quarter of the chamber
	... half of the chamber
	... all the chamber

REPAIRS NEEDED	No. of courses of brick:
	Estimated no of bricks:
	Cement plastering needed:....

EXISTING COVER	Type: ... None ... Precast cement ...Steel
Status: ... OK	... Some repair needed ... Needs new

Remarks:.....

WHEN PIPELINE MAPS OF NYALA ARE BEING MADE, ALL VALVES SHOULD BE NUMBERED IN A LOGICAL WAY !

بيانات حالة فرق البليقة

التاريخ -----

الحى -----

نشرة أقرئ منكم لفرة البليق -----

١- مقاشات الفرة الناصية العول/م العود/م

٢- مقاشات الفرة الداخلية -----

٣- نوعي وعيم البليق بالفرة -----

٤- صميم الفرة بالبليقة -----

٥- صد يتاج البليق لتعليق زعم/لا

٦- صميم الأوساخ التي يبيد إزالتها ١- ربع الفرة ملء بالأوساخ

٢- نصف الفرة -

٣- كل الفرة -

٧- التوصيات المطلوبة :-

١- عدد اللاميد للعلوية لكلمة الفرة -----

٢- كمية الطوب المألوف لزاله -----

٣- كمية الأسمنت للياصم للعلوي -----

٨- النظام الحالي :-

١- النوعي : لا يوجد خطأ أسمنت حديد

٢- الحالة : بحالة جيدة يتاج لبعض لصيابة يتاج لفناء حديد

٩- ملحوظات أخرى :-

الهيئة القومية لنظام المدن

العمل المنجز بواسطة كل الأقسام - التقرير الشهري لقسم القدرات -

شهر

رقم	القسم لهذا اليوم	القطع	الاعادة	ادارة تم نقيشها	ادارة تمت نفاذها	توصيلات غير شرعية	سلاسل جديدة	ادارة تم نقلها	قائمة القسم لهذا اليوم
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
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26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									

العدد من الأقسام التي تم نفاذها من خطة العمل المنجز بواسطة كل الأقسام - التقرير الشهري لقسم القدرات -

SECTION REPORTING FORMS

**METER MECHANICAL AND
INSPECTION SECTION**

NATIONAL URBAN WATER CORPORATION

NYALA - SUDAN

DAILY TEAM ACTIVITY REPORT

DATE:

METER MECHANICS & INSPECTION SECTION

Meter mechanic:

Inspector:

House nr										
Activity										
House nr										
Activity										
House nr										
Activity										
House nr										
Activity										
House nr										
Activity										

Code: Activity:

Totals:

- 1. Disconnection
- 2. Failed disconnection
- 3. Reconnection
- 4. Failed reconnection
- 5. General inspection
- 6. Meter cleaning
- 7. Inspection on illegal connection
- 8. Inspection new construction

Remarks:

بسم الله الرحمن الرحيم /

الهيئة القومية لمياه المدن

(قسم: لعدادات)

// //

الموضوع: التفريغ اليومي

الخطار بالقرائة
التاريخ /

								تجربة المتزل
								النشاط
								تجربة المتزل
								النشاط
								تجربة المتزل
								النشاط
								تجربة المتزل
								النشاط
								تجربة المتزل
								النشاط
								تجربة المتزل
								النشاط

العدد

١/ القناع

٢/ اسباب لعدم القطع

٣/ الاعداد

٤/ اسباب عدم الاعداد

٥/ التفريغ

٦/ العطفة

٧/ التفريغ للمنازل التي بها مياحي جديدة

٨/ التفريغ للمنازل التي بها مياحي جديدة

الملحوظات:

SECTION REPORTING FORMS

METER READING SECTION

NATIONAL URBAN WATER CORPORATION NYALA - SUDAN

DAILY INDIVIDUAL ACTIVITY REPORT

DATE:....

METER READING SECTION

Name meter reader:.....

House numbers of meters read:

Remarks and irregularities:

Signed:

SECTION REPORTING FORMS

**CONSUMER ACCOUNTS
SECTION**

NATIONAL URBAN WATER CORPORATION NYALA - SUDAN

WEEKLY STATUS REPORT Week nr.: .. from ../.. till ../.. 199.

CONSUMER ACCOUNTS SECTION

This report is to be handed in every saturday morning before 10.00

Block nr.	Consumer account clerk's name	Accounts are up-to-date till:	No. of dis-connection not. issued
Grmt acc. Tankers Comm.& Ind. Concess. kiosks			
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
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19			
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21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

Chief of section:
Date: Time:
Signature:

NATIONAL URBAN WATER CORPORATION

NYALA - SUDAN

MONTHLY REPORT

MONTH:

TANKERS

Date bill sent:	Date meter reading:	Customer nr.:	Customer name:	Amount this bill:	Amount arrears:

الهيئة القومية لمياه المدن
إصدار الفواتير لأصحاب التانكو

التقرير الشهري : شهر ١٩٩٣

تاريخ إرسال الفاتورة	سعة التانكو	نمرة التانكو	اسم صاحب التانكو	مبلغ الفاتورة	إتاخرات

MONTHLY INVOICES ISSUED TO TANKERS

NATIONAL URBAN WATER CORPORATION

NYALA - SUDAN

MONTHLY REPORT

MONTH:.....

GOVERNMENT INSTITUTIONS

Date bill sent:	Date meter reading:	Customer nr.:	Customer name:	Amount this bill:	Amount arrears:

الهيئة القومية لمياه المدن
اصدار الفواتير للمؤسسات الحكومية

التقرير الشهري : شهر ١٩٩٢م

المناخات	مبلغ الفاتورة	اسم المؤسسة	نوع المؤسسة	تاريخ قراءة العداد	تاريخ ارسال الفاتورة

MONTHLY INVOICES ISSUED
TO GOVERNMENT INSTITUTIONS

NATIONAL URBAN WATER CORPORATION

NYALA - SUDAN

MONTHLY REPORT

MONTH:.....

COMMERCIAL AND INDUSTRIAL

Date bill sent:	Date meter reading:	Customer nr.:	Customer name:	Amount this bill:	Amount arrears:

الهيئة القومية لمياه المدن
إصدار الفواتير للمحلات الصناعية والتجارية

التقرير الشهري: شهر ١٩٩٣

المنتجات	مبلغ الفاتورة	اسم المكان	نمرة المكان	تاريخ قراءة العداد	تاريخ ارسال الفاتورة

MONTHLY INVOICES ISSUED TO INDUSTRIES

SECTION REPORTING FORMS

TREASURY SECTION

SECTION REPORTING FORMS

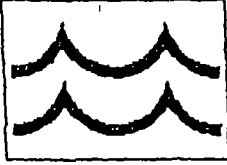
**GENERAL ACCOUNTS
SECTION**



الهيئة القومية لشبكات المياه بالنيالا
NATIONAL URBAN WATER CORPORATION NYALA

المعلومات الإدارية
MANAGEMENT INFORMATION SHEET

شهر _____ لسنة _____
MONTH: _____ 19____



	الشهر الماضي LAST MONTH	الشهر الحالي THIS MONTH	الفرق DIFFERENCE (+/-)
1. WATER DELIVERY			إمداد المياه بالامطار المكعبه / :
volume - m3			1 / للمدينه
m3.to town	2 / الاكشاك الحديده
m3.to new kiosks	المجموع
Total m3	=====	=====	=====
hours			عدد ساعات الضخ / :
hrs.to town	1 / للمدينه
hrs.to new kiosks	2 / للاكشاك الحديده
Total hrs.	=====	=====	=====
2. SUPPLY-SIDE			الامداد من الابار / :
Working boreholes	1 / عدد الابار العامله
Working booster pumps	2 / عدد محطات البوسترز العامله
3. PIPE LEAKS			الكسور / :
reported	1 / المبلغ عنها
repaired	2 / التي تم اصلاحها
4. PRIVATE CONNECTIONS			توصيلات المشتركين / :
disconnections	1 / القطع
(re)connections	2 / الاعاده
new connections	3 / التوصيلات الجديده
current connections	4 / حطة التوصيلات الحاليه
5. FUEL USAGE			اوقسود / :
fuel issued (gal)	1 / الوقود الصادر
fuel in store (gal)	2 / الوقود بالمخزن
6. STAFFING			العاملين / :
management, supervisory	1 / بالعمل الاداري والارافيه
clerical & accounting	2 / الكتابيه والحسابيه
labour	3 / العمال
daily paid labour	4 / عمال اليوميه
Sub-total	=====	=====	=====
absence (man days/30)	اشغاد من العاملين في الشهر
Total staff present	=====	=====	احد ور من العاملين في الشهر
Overtime hrs.	عدد ساعات الاجر الاضافي

المعلومات المالية

FINANCIAL DATA

بمناسبة الـ شهر الماضي
UPTO END OF
LAST MONTH

الشهر الحالي
THIS MONTH

بمناسبة الـ شهر الحالي
UPTO END OF
THIS MONTH

1. INCOME

private connections	.....	.....	.....
old kiosks	.....	.....	.....
new kiosks	.....	.....	.....
institutions	.....	.....	.....
industrial, commercial	.....	.....	.....
tankers	.....	.....	.....
connection, re-connection	.....	.....	.....
other	.....	.....	.....

Total (1) £S

2. EXPENDITURE

staff cost	.....	.....	.....
operations & maintenance	.....	.....	.....
investment/capital expense	.....	.....	.....

Total (2) £S

3. TRANSEERS

to NUWC Darfur	.....	.....	.....
to NUWC Khartoum	.....	.....	.....
other	.....	.....	.....

Total (3) £S

4. RETAINED INCOME (1-2-3) £S

5. COLLECTION EFFICIENCY

new kiosks%%%
old kiosks%%%

6. DEBTORS/CREDITORS

accounts receivable	.....	.....	.....
accounts payable	.....	.....	.....

Total receivable £S

7. CASH

in hand	.....	.....	.....
at Bank of Sudan	.....	.....	.....
at Unity Bank NUWC a/c	.....	.....	.....
at Unity Bank kiosk a/c	.....	.....	.....

Total £S

لدخل من /

1 / اشتراك
2 / الاكشاك القديمة
3 / الاكشاك الجديدة
4 / المؤسسات
5 / المبانجالتجارية
6 / المياه بالتانكر
7 / التفتريات الجديدة والاعادة
8 / اى ايرادات اخرى

المجموع

التكاليف /

1 / تكلفة العاملين
2 / التشغيل والادوية
3 / تكاليف رسيه

المجموع

التحويلات: /

1 / لمياه المدن الفاشر
2 / لمياه المدن - الخرطوم
3 / اى تحويلات اخرى

المجموع

الدخل المتبقى

نسبة التحصيل من: /

1 / الاكشاك الجديدة
2 / الاكشاك القديمة

الدائنين والمديون: /

1 / الحسابات المتوقعة استلامه
2 / الحسابات الواجب دفعه

جملة الحسابات المتوقعة استلامه

الفرق
DIFFERENCE

(+/-)

الحسابات الموجودة نقداً: /

1 / بالخزينه
2 / بنك السودان
3 / بنك الوحدة
4 / بحساب الاكشاك بنك الوحدة

المجموع

الهيئة القومية لمياه المدن / نبالا

التاريخ / ١٣ / ٣ / ١٩٩٣ م

العمرة /

الموضوع / : تقرير المعلومات المالية / شهر
سنة / ١٩٩٣ م

اولا / الدخل من الفئات التالية /

١ / المشتركين /

٢ / الاكشاك الجديدة

٣ / الاكشاك القديمة /

٤ / المؤسسات

٥ / المصانع التجارية

٦ / المياه بالتأجير

٧ / التوصيلات الجديدة والاعادة

٨ / اى ايرادات اخرى

جملة الدخل على هذا الشهر

ثانيا / تكلفة الحاملين لقسم نبالا فقط

١ / تكلفة الصيانة والتشغيل نبالا فقط

جملة التكلفة لهذا الشهر

ثالثا / التحاويل /

التحاويل من الفاشر لقسم نبالا

التحاويل من نبالا لزالجى قيمة وقود

رابطا / جملة استقطاعات الحاملين من قسم نبالا

لهذا الشهر

خامسا / المبلغ الموجود تقدا في نهاية هذا الشهر في / :

١ / الخزينة

٢ / بنك السودان

٣ / بنك الوحدة

٤ / حساب الاكشاك / بنك الوحدة

توجه //

الهيئة القومية لمياه المدن / بيلا

بيانات التحصيل الاسبوعية من اكشاك المشروع

التاريخ /	القراءة الساعة الثامنة صباحا	القراءة للساعة الثانية عشو ظهرا	المنصرف من المياه بالامطار المكعبة
الخميس			
الجمعة			
السبت			
الاحد			
الاثنين			
الثلاثاء			
الاربعاء			
كمية المنصرف اسبوعيا			مترو ٣

جلبه

- أ/ الدخل المتحصل عليه هذا الاسبوع _____
- ب/ القراءة بداية الاسبوع _____
- ج/ القراءة نهاية الاسبوع _____
- د/ المنصرف من المياه / امطار مكعبة ب ج _____
- هـ/ ١٠% من المنصرف نسبة تدفق او \times د _____
- و/ كمية المياه مترو ٣ افتراض بيعها لا كشاك / د هـ _____
- ب/ كمية المياه التي صرفت لا كشاك بالجوز \times ٢٥ و _____
- نسبة التحصيل هذا الاسبوع بواقع أ _____
- $\times 100\%$ _____
- ب سعر الجوز واحد جنيهه _____

KIOSK REVENUE COLLECTION EFFICIENCY FORM

SECTION REPORTING FORMS

**PERSONNEL AND
ADMINISTRATION SECTION**

NATIONAL URBAN WATER CORPORATION NYALA - SUDAN

MONTHLY REPORT PERSONNEL SECTION MONTH:.....

1) PERSONNEL EMPLOYED AT THE END OF THE MONTH

	MGT (1)	CLER. & ACC. + (2)	LABOUR + (3)	CASUAL LABOUR + (4)	ASSIGNED OUT OF NYALA + (5)	TOTAL = (6)
Management						
Operations						
Mechan. maintenance						
Electr. maintenance						
Pipelines						
Meter Mech. & Insp.						
Meter readers						
Consumer accounts						
Treasury						
General accounts						
Personnel						
Administration						
Section general						
Stores						
Garage						
Drivers						
Total per category						

Specify personnel assigned out of NUWC Nyala (they must not be recorded under sections):

Name: Section: Job title: Assigned to:

2) NEW HIRINGS:

Date:	Name:	Section:	Rank:	Job title:

3) LEAVING SERVICE:

Date:	Name:	Section:	Rank:	Job title:

4) DISCIPLINARY ACTIONS:

Date:	Name:	Section:	Decision taken:

5) ON SUSPENSION:

Date:	Name:	Section:	Till:

6) FORESEEN RETIREMENTS IN NEXT 12M MONTHS:

7) FORESEEN MILITARY SERVICE AND PDF INVOLVEMENTS:

8) VACANCIES TO BE FILLED:

9) PROGRESS ON CATCH-UP WORK POST-SERVICE BENEFITS:

10) FURTHER INFORMATION TO BE REPORTED:

Signed:

Date:

Chief Personnel section

NATIONAL URBAN WATER CORPORATION NYALA - SUDAN

MONTHLY REPORT PERSONNEL SECTION MONTH:.....

1) PERSONNEL EMPLOYED AT THE END OF THE MONTH

	MGT (1)	CLER. & ACC. + (2)	LABOUR + (3)	CASUAL LABOUR + (4)	ASSIGNED OUT OF NYALA + (5)	TOTAL = (6)
Management						
Operations						
Mechan. maintenance						
Electr. maintenance						
Pipelines						
Meter Mech.& Insp.						
Meter readers						
Consumer accounts						
Treasury						
General accounts						
Personnel						
Administration						
Section general						
Stores						
Garage						
Drivers						
Total per category						

Specify personnel assigned out of NUWC Nyala (they must not be recorded under sections):

Name: _____ Assigned to: _____

2) NEW HIRINGS:

Date:	Name:	Section:	Rank:	Job title:

NATIONAL URBAN WATER CORPORATION NYALA - SUDAN

MONTHLY REPORT PERSONNEL SECTION MONTH:.....

1) PERSONNEL EMPLOYED AT THE END OF THE MONTH

	MGT (1)	CLER. & ACC. + (2)	LABOUR + (3)	CASUAL LABOUR + (4)	ASSIGNED OUT OF NYALA + (5)	TOTAL = (6)
Management						
Operations						
Mechan. maintenance						
Electr. maintenance						
Pipelines						
Meter Mech.& Insp.						
Meter readers						
Consumer accounts						
Treasury						
General accounts						
Personnel						
Administration						
Section general						
Stores						
Garage						
Drivers						
Total per category						

Specify personnel assigned out of NUWC Nyala (they must not be recorded under sections):

Name: Section: Job title: Assigned to:

2) NEW HIRINGS:

Date:	Name:	Section:	Rank:	Job title:

3) LEAVING SERVICE:

Date:	Name:	Section:	Rank:	Job title:

4) DISCIPLINARY ACTIONS:

Date:	Name:	Section:	Decision taken:

5) ON SUSPENSION:

Date:	Name:	Section:	Till:

6) FORESEEN RETIREMENTS IN NEXT 12M MONTHS:

7) FORESEEN MILITAIRY SERVICE AND PDF INVOLVEMENTS:

8) VACANCIES TO BE FILLED:

9) PROGRESS ON CATCH-UP WORK POST-SERVICE BENEFITS:

10) FURTHER INFORMATION TO BE REPORTED:

Signed:

Date:

Chief Personnel section

الهيئة القومية لمياه المدن
التقرير الشهري لقسم شئون الافراد

Personnel Sheet

شهر ١٩٩٣ م

١٢

العاملين بنهاية الشهر

٦ = ٥ + ٤ + ٣ + ٢ +

القسم	ادارة	كتايب و حسابى	العمال	عمال اليوميات	عاملين بالمحطات الاخرى	جملة العاملين
١- الادارى	٢				١	١
٢- التشغيل			٢٨		٢	٣٠
٣- الصيانة الميكانيكية			٥			٥
٤- الصيانة الكهربائية			٢		٢	٤
٥- التوزيع			٤	١	١	٦
٦- العدادات			١٧			١٧
٧- القراءة والتوزيع		٧		٢		٩
٨- حسابات المشتركين		٥		٤	١	١٠
٩- الخزينة		١				١
١٠- الحسابات العمومية		٤			١	٥
١١- الشئون الادارية		٢		٥	١	٨
١٢- العمومي			١	١		٢
١٣- المخازن		٤	١	٢		٧
١٤- الجراج			٢	١		٣
١٥- السائقين			١	٢		٣
١٦- السائقين			١	٢		٣
١٧- السائقين			١	٢		٣
١٨- السائقين			١	٢		٣
١٩- السائقين			١	٢		٣
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٧٩- السائقين			١	٢		٣
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٨٩- السائقين			١	٢		٣
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٩٦- السائقين			١	٢		٣
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٩٨- السائقين			١	٢		٣
٩٩- السائقين			١	٢		٣
١٠٠- السائقين			١	٢		٣
١٠١- السائقين			١	٢		٣
١٠٢- السائقين			١	٢		٣
١٠٣- السائقين			١	٢		٣
١٠٤- السائقين			١	٢		٣
١٠٥- السائقين			١	٢		٣
١٠٦- السائقين			١	٢		٣
١٠٧- السائقين			١	٢		٣
١٠٨- السائقين			١	٢		٣
١٠٩- السائقين			١	٢		٣
١١٠- السائقين			١	٢		٣
١١١- السائقين			١	٢		٣
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١١٣- السائقين			١	٢		٣
١١٤- السائقين			١	٢		٣
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١١٧- السائقين			١	٢		٣
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١٢٤- السائقين			١	٢		٣
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١٩٧- السائقين						

الهيئة القومية لمياه المدن
التقرير الشهري لقسم شئون الافراد
شهر ١٩٩٣ م

Research Section

٢٣

العاملين بنهاية الشهر + ٢ + ٣ + ٤ + ٥ = ٦

القسم	ادارة	كتابي و حسابي	العمال	عمال اليوميات	عملين بالمحطات الاخرى	جملة العاملين
١- الاداري	٢				١	٢
٢- التشغيل			٢٨		٢	٣٠
٣- الصيانة الميكانيك			٥			٥
٤- الصيانة الكهربائية			٤		٢	٦
٥- التوزيع			٤٠	١	١	٤٢
٦- العدادات			١٧			١٧
٧- القراءة والتوزيع		٧	٢			٩
٨- حسابات المشتركين		٥		٤	١	١٠
٩- الخزينة		١				١
١٠- الحسابات العمومية		٤			١	٥
١١- الشئون الادارية		٩		٥	١	١٥
١٢- العمومي			١٠			١٠
١٣- المختارون		٤	١	٢		٧
١٤- الجراج			٢	١		٣
١٥- السائقين			١	٤	١	٦
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٩٧- السائقين			١	٤	١	٦
٩٨- السائقين			١	٤	١	٦
٩٩- السائقين			١	٤	١	٦
١٠٠- السائقين			١	٤	١	٦

الصفحة
١٩٥

تدرج اسماء العاملين بالمحطات الاخرى - كاس - زالنحى بالمربعات الخاصة بالاقسام

① اضافة ~~قصة~~ قصة ~~عنه~~ عنه ~~الكتاب~~ الكتاب

اضافة قصة عنه الكتاب

والفصل الكتاب عنه الكتاب

لكن العقل لنفس الكتاب

الكتاب عنه الكتاب

الإيمان

٢١

٢١

الخاصة

٢١

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٢١

٢١

٢١

In summary, a possible format for the Job Descriptions looks as follows:

JOB TITLE:
DEPARTMENT:
SECTION:
RESPONSIBLE TO:
RESPONSIBLE FOR:

العمل
القسم
الوحدة
مسؤول
مسؤول (مدير العمل)

DUTIES AND RESPONSIBILITIES:

- 1
- 2
- 3

TASKS TO BE UNDERTAKEN:

- 1
- 2
- 3
- 4
- ETC

مدير العمل (3)

RESULTS TO BE ACHIEVED:

EQUIPMENT/TECHNIQUES TO BE USED:

FINANCIAL AUTHORITY:

WORKING CONDITIONS:

place:
movement:
working hours:
overtime:

استعمال المعدات - الأداة
السلطة المالية
ظروف العمل
المكان
أعمال التمرين للمحلل
ساعات العمل الرسمية
ساعات العمل الإضافية

QUALIFICATIONS REQUIRED:

EXPERIENCE REQUIRED:

PHYSICAL CHARACTERISTICS:

ATTITUDES AND PERSONALITY:

RANK/PAY SCALE:

SALARY:

ALLOWANCES:

OTHER BENEFITS:

الدرجة لائمه اولى
الخبرة المهنية
الخصائص الجسدية
موقف الشخصية

It is clear that this is a rather sophisticated model, which does not need to be applied in full in the Nyala situation. However the process of talking about the details for each job will assist greatly in bringing ambiguities in the open and in establishing consensus about expectations and results.

Job description

وصف الوظيفة

Job Title

Department

Section

responsible to

Responsible for

Responsibilities

اسم الوظيفة :
 الوحدة :
 القسم :
 لمن يوفى القبولات شاقن الوظيفة /
 مسئول عن
 المسئوليات والواجبات

Tasks to be undertaken

(1)
 (2)
 (3)
 الواجبات يجب تنفيذها /
 (1)
 (2)
 (3)
 (4)

Result to be achieved
 to be

technique & equipment used

الوسائل المستخدمة في تأديته عمله /

نتائج يجب تحقيقها /
 (1)
 (2)
 (3)
 الأدوات والوسائل التي يستخدمها شاقن الوظيفة في تأديته عمله /
 (1)
 (2)
 (3)
 (4)

Human attributes

الصفات المطلوبة

(1)
 (2)
 (3)
 (4)

Working Condition

place

movement

working hours

overtime hours

qualification

experience

physical characteristics

Attitude & Personality

Salary group

Salary

allowance

other benefits

ظروف العمل /
 المكان /
 الحركة /
 ساعات العمل الرسمية /
 ساعات الاجور الإضافي
 الخبرة صفات المهارات المطلوبة
 الخبرة المهارات /
 السمات الشخصية /
 طبيعة (تحت قبة) العمل
 المجموعة /
 المراتب /
 المزايا /
 أي فوائد أخرى

In summary, a possible format for the Job Descriptions looks as follows:

JOB TITLE:
DEPARTMENT:
SECTION:
RESPONSIBLE TO:
RESPONSIBLE FOR:

الوظيفة
القسم
الوحدة
مسؤول
مسؤول

الوظيفة
القسم
الوحدة
مسؤول
مسؤول

DUTIES AND RESPONSIBILITIES:

- 1
2
3

TASKS TO BE UNDERTAKEN:

- 1
2
3
4
ETC

المهام
3

RESULTS TO BE ACHIEVED:

نتائج

EQUIPMENT/TECHNIQUES TO BE USED:

المعدات والتقنيات

FINANCIAL AUTHORITY:

السلطة المالية

WORKING CONDITIONS:

ظروف العمل

place:
movement:
working hours:
overtime:

المكان
الحركة
ساعات العمل
ساعات إضافية

QUALIFICATIONS REQUIRED:

المؤهلات المطلوبة

EXPERIENCE REQUIRED:

الخبرة المطلوبة

PHYSICAL CHARACTERISTICS:

الصفات الجسدية

ATTITUDES AND PERSONALITY:

الصفات الشخصية

RANK/PAY SCALE:

الرتبة والمعدل

SALARY:

الراتب

ALLOWANCES:

المزايا

OTHER BENEFITS:

مزايا أخرى

It is clear that this is a rather sophisticated model, which does not need to be applied in full in the Nyala situation. However the process of talking about the details for each job will assist greatly in bringing ambiguities in the open and in establishing consensus about expectations and results.

Job description

وصف الوظيفة

Job Title

Department

Section

responsible to

Responsible for

Responsibilities

اسم الوظيفة :

الوحدة :

التقسيم :

لمن يوقع التقارير شاغل الوظيفة /

مسئول عن

المسئوليات والواجبات

(1)

(2)

(3)

الواجبات يجب تنفيذها /

(1)

(2)

(3)

(4)

نتائج يجب تحقيقها /

(1)

(2)

(3)

الدوات والاشياء التي يستخدمها شاغل الوظيفة في تأديته عمله /

(1)

(2)

(3)

(4)

السلطات العاليه /

(1)

(2)

(3)

(4)

Tasks to be undertaken

Result to be achieved

to be

Technique of equipment used.

الاشياء التي يستخدمها شاغل الوظيفة في تأديته عمله /

Financial authorities

Working Condition

place

movement

working hours

overtime hours

qualification

experience

characteristics

Attitude & Personality

Salary group

Salary

allowance

1 / 1 / 1

ظروف العمل /

المكان /

الحركة /

ساعات العمل الوردية /

ساعات الاجور الاضافي

المؤهلات المطلوبة للوظيفة

الخبرة المطلوبة /

السمات الشخصية /

تجربة الكلام

المجموعة /

المرتبه /

الملاوة /

NATIONAL URBAN WATER CORPORATION

NYALA - SUDAN

INSTITUTIONAL STRENGTHENING AND MANAGEMENT DEVELOPMENT PROJECT

***** EMPLOYEE EVALUATION FORM *****

1. NAME:
2. JOB TITLE:
3. RESPONSIBLE FOR:

5

4. PERFORMANCE OF REGULAR TASKS: (1) better than required
(2) as required
(3) a little less than required
(4) really needs improvement

5. PERFORMANCE OF SPECIAL TASKS: (1) amazingly well
(2) rather good
(3) rather poor
(4) poor

6. FOLLOWING UP OF INSTRUCTIONS FOR REGULAR WORK: (1) willingly
(2) sometimes under protest
(3) often under protest

7. FOLLOWING UP OF INSTRUCTIONS FOR NEW TYPES OF WORK: (1) willingly
(2) sometimes under protest
(3) often under protest

8. WORK ATTITUDE: (1) puts in a good day of work
(2) just satisfactory
(3) needs encouragement
(4) even after encouragement a slow worker

9. SKILL LEVEL: (1) very good
(2) good
(3) just enough
(4) needs much improvement
(5) very poor

10. SPECIAL SKILLS OR KNOWLEDGE THAT CAN BE USEFUL FOR THE CORPORATION: 1. () slight, () good, () very good
2. () slight, () good, () very good
3. () slight, () good, () very good
4. () slight, () good, () very good

11. ABILITY TO GIVE GUIDANCE TO OTHERS: (1) very good
(2) normal
(3) little

12. LEADERSHIP TALENT: (1) excellent
(2) good
(3) little

13. ABILITY TO SOLVE PROBLEMS INDEPENDANTLY: (1) very good
(2) good
(3) little (4) very little

INSTITUTIONAL STRENGTHENING AND MANAGEMENT DEVELOPMENT PROJECT

***** EMPLOYEE EVALUATION FORM *****

1. NAME: *الاسم*
 2. JOB TITLE: *المسمى الوظيفي*
 3. RESPONSIBLE FOR: *مسئول*

4. PERFORMANCE OF REGULAR TASKS: *العمل الاعتيادي*
 (1) better than required
 (2) as required
 (3) a little less than required
 (4) really needs improvement

5. PERFORMANCE OF SPECIAL TASKS: *العمل الخاص*
 (1) amazingly well
 (2) rather good
 (3) rather poor
 (4) poor

6. FOLLOWING UP OF INSTRUCTIONS FOR REGULAR WORK: *متابعة التعليمات الاعتيادية*
 (1) willingly
 (2) sometimes under protest
 (3) often under protest

7. FOLLOWING UP OF INSTRUCTIONS FOR NEW TYPES OF WORK: *متابعة التعليمات لنوعيات العمل الجديدة*
 (1) willingly
 (2) sometimes under protest
 (3) often under protest

8. WORK ATTITUDE: *السلوك الوظيفي*
 (1) puts in a good day of work
 (2) just satisfactory
 (3) needs encouragement
 (4) even after encouragement a slow worker

9. SKILL LEVEL: *مستوى المهارة*
 (1) very good
 (2) good
 (3) just enough
 (4) needs much improvement
 (5) very poor

10. SPECIAL SKILLS OR KNOWLEDGE THAT CAN BE USEFUL FOR THE CORPORATION:
 1..... (1) slight, (2) good, (3) very good
 2..... (1) slight, (2) good, (3) very good
 3..... (1) slight, (2) good, (3) very good
 4..... (1) slight, (2) good, (3) very good

11. ABILITY TO GIVE GUIDANCE TO OTHERS: *القدرة على توجيه الآخرين*
 (1) very good
 (2) normal
 (3) little

12. LEADERSHIP TALENT: *مهارات القيادة*
 (1) excellent
 (2) good
 (3) little

13. ABILITY TO SOLVE PROBLEMS INDEPENDANTLY: *القدرة على حل المشاكل*
 (1) very good
 (2) good
 (3) little (4) very little

SECTION REPORTING FORMS

**PURCHASING AND STORES
SECTION**

NATIONAL URBAN WATER CORPORATION, NYALA - SUDAN

STORES & PURCHASING Week nr: .. Weekly report:...till...
 (to be handed in every saturday before 10 a.m.)

FUEL & LUBRICANTS

Date	Description	Diesel	Petrol	Engine oil
	Stock beginning of week Products received this week			
	Total (A)			
	Prod. distributed to Lic.nr.			
	Total distributed this week(B)			
	Total in stock end of week(A-B)			

LOCAL PURCHASES

P.o.request nr	Date	Description	Size	Quantity	Unit price

الهيئة القومية لمياه المدن
قسم المخازن والمشتريات

التقرير الاسبوعي من ٢٢/٩/٤٥ الى ٢٢/٩/٤٥

يوقع هذا التقرير كل يوم سبت

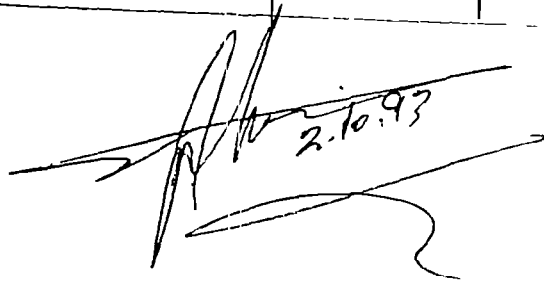
التاريخ	الوقود والزيوت	جما زولين	بنزين	زيت مكنسة
	الكمية الموجودة في بداية الاسبوع	185	NIL	114 Kg
	الكمية المستهلكة هذا الاسبوع	NIL	44	NIL
	المجموع (أ)	185	44	114 Kg
	الكمية المستهلكة هذا الاسبوع	57	14	25 Kg
	مجموع الكمية المستهلكة هذا الاسبوع (ب)	57	14	25 Kg
	الكمية الموجودة بنهاية الاسبوع (أ + ب)	128	30	89 Kg

المشتريات المحلية

رقعة طلب الشراء	التاريخ	الوصف	الحجم	الكمية	سعر الوحدة
71	28.9.93	Benzoin	٤٤ Gallon	٤٤	585.30
73	29.9.93	مخاريط	٤٤	01	200.00
75	29.9.93	ادوية صلبة	-	-	6130.00
74	29.9.93	فوتون	٣	١	5100.00

2.10.93
التوقيع

رقم الأوراق	أرباح ماكتسب	حاليون يتزوم	حاليون طائلون	تعمير العريه
—	—	}	22	٥٢١٩
2	—		10	١٤٥٩
—	—		13	٤-٢٤
2	—		8	11٥1
—	—		7	٨١٧
—	—		6	٢٢٢٢
١، تحوصه	—		1	4	مذكره اضرار
5	—	14	57	الصله



 2.10.93

٩٢/٩١٤٣ ← ٩٢/٩١١١

شراء العربيه	جالون هارولد	جالون تزييه	زيت مكثه
HL ٣.٣٤	١٩	—	
PR ٥٣/٢٧ ✓ Disk?	١٣	—	
١٤٢٩ ✓	٥	—	
Gal. ١١٥١ ✓	٥	—	
Small Pick ٤٤٤٤	١	١	
٥٤ ٥٤ ٥٤	٣	—	١ جالون
٥٤ ٥٤ ٥٤	٥٤ جالون	٥٤ جالون	١ جالون

25.9.93

الهيئة القومية لمياه المدن
قسم المخازن والمشتريات

التقرير الاسبوعي من ١٨/٩/٩٣ الى ٢٣/٩/٩٣

يوقع هذا التقرير كل يوم سبت

التاريخ	الوقود والزيوت	جازولين	بنزين	زيت - كerosene
	الكمية الموجودة في بداية الاسبوع	١٦٤	١٤	١١٩ كيلوجرام
	الكمية المستلمة هذا الاسبوع	٦٦	لا شيء	لا شيء
	المحجج ١٨	٢٣٠	١٤	١١٩ كيلوجرام
	الكمية المستهلكة هذا الاسبوع	٤٥	١٤	٥٠ كيلوجرام
	مجموع الكمية المستهلكة هذا الاسبوع (ب)	٤٥	١٤	٥٠ كيلوجرام
	الكمية الموجودة بنهاية الاسبوع (أ - ب)	١١٥	لا شيء	١١٤ كيلوجرام

المشتريات المحلية

نوع الطلب الشراء	التاريخ	الوصف	الحجم	النمية	سعر الوحدة
٦٩	١٨/٩/٩٣	جازولين	١٦٤	٠.٦٦	٢٠٦.٣٠
٧٠	١٨/٩/٩٣	زيت كerosene	٥٠	٠.٣٠	١٥.٠٠

23-9-93

SECTION REPORTING FORMS

**TRANSPORTATION AND
GARAGE SECTION**

NATIONAL URBAN WATER CORPORATION

NYALA - SUDAN

DAILY VEHICLE ACTIVITY REPORT

DATE:.....

VEHICLE NR: Assigned to: (section) Driver:	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....
Time:					
7 - 7.30 7.30 - 8 8 - 8.30 8.30 - 9 9 - 9.30					
9.30 - 10 10 - 10.30 10.30 -11 11 - 11.30 11.30 - 12					
12 - 12.30 12.30 - 13 13 - 13.30 13.30 - 14 14 - 14.30					
14.30 - 15 15 - 16 16 - 17 17 - 18 18 - 19					
19 - 20 20 - 21 21 - 22 22 - 23 23 - 24					
24 - 7					

Remarks and irregularities:

Signed:

Example how this form is to be filled:

NATIONAL URBAN WATER CORPORATION

NYALA - SUDAN

DAILY VEHICLE ACTIVITY REPORT

DATE: 16 August '93

VEHICLE NR: Assigned to: (section) Driver:	693 pipeline dept. Adum	.....	.....	.....	.....
Time:					
7 - 7.30 7.30 - 8 8 - 8.30 8.30 - 9 9 - 9.30	CWE				
9.30 - 10 10 - 10.30 10.30 - 11 11 - 11.30 11.30 - 12	sect.				
12 - 12.30 12.30 - 13 13 - 13.30 13.30 - 14 14 - 14.30	Pipeline				
14.30 - 15 15 - 16 16 - 17 17 - 18 18 - 19					
19 - 20 20 - 21 21 - 22 22 - 23 23 - 24					
24 - 7					

Remarks and irregularities:

Signed:

693: cooling problems, needs immediate attention

5051: weak battery, tomorrow to garage

817: battery not fixed, tomorrow short time in garage

625: low oil level in oil pan, warning to driver