

Kathmandu Upatyaka Khanepani Limited



**Annual Report**  
**on**  
**Condition and Operation of the Service System**  
**1 Falgun 2064 – 31 Asadh 2065**

**Kathmandu**  
**Nepal**

## CONTENTS

Introduction.....	1
General Assessment of Service System.....	2
Condition at the Beginning of the KUKL Operations .....	2
Detailed Observations and Assessments.....	4
Present Operation of the Service System.....	6
Operational Data/status.....	14
Major Reservoir Capacity (Larger than 500 m <sup>3</sup> ) .....	14
KUKL Network .....	15
Branch Report 13 February to 15 July 2008.....	20
Number of connections .....	21
On-going projects.....	22
Human resources.....	23
Trainings .....	25
Financial status.....	26

---

## INTRODUCTION

---

Kathmandu Upatyaka Khanepani Limited (KUKL), a public limited company was established in 2007 under the “Company’s Act” under a Public Private Partnership (PPP) model. The current shareholders of KUKL are the Government of Nepal (GON), Municipalities within the Kathmandu Valley (Kathmandu Metropolis and Lalitpur Sub-Metropolis), Federation of Nepalese Chamber of Commerce and Industries (FNCCI)/Nepal Chamber of Commerce (NCC) and the Employees Trust. The Board of Directors of the Company consists of seven members including three independent Board Members.

A thirty-year license was granted to KUKL on 1 Falgun 2064 (13 February 2008) by the Kathmandu Valley Water Supply Management Board (KVWSMB) for operating the water supply and sanitation services in the service areas within Kathmandu Valley. KUKL took over responsibilities to operate the water supply and sanitation services under this license and a lease agreement for the same period (between KVWSMB and KUKL) on 13 Feb 2008. Three managers, General Manager, Administrative/Finance Manager and Technical Manager, were appointed on contract between March-April 2008 and are supported by three deputy managers and staff deputed from KVWSMB.

This **Annual Report on Condition and Operation of the Service System for FY 2064/65 (2007/2008)** gives the details on the condition and operation of the Service System including details of investments and other changes in the Service Assets in FY 2064/2065..

---

## **GENERAL ASSESSMENT OF SERVICE SYSTEM**

---

### ***Condition at the Beginning of the KUKL Operations***

This summary is prepared based on detailed situation assessments conducted through physical visits and surveys as well as through detailed questionnaires which were filled by each of the branches, departments and unit (conducted between March – June 2008).

### **Water Supply Situation in Branches**

- Almost all water production figures are from historical data or are estimated. Only a few production plants have metering equipment.
- It is assumed that KUKL in dry season has a shortfall in supply of some 60%, and in rainy season the shortfall is 30% of supply.
- Treatment plants were in poor functional and maintenance state and spare parts were not available in all treatment plants. Water is distributed directly to the customer without treatment from many tube wells from which some waters have high content of ammonium, iron and some, arsenic.
- The use of chemicals used to be done according to its availability in stock rather than on the need for water treatment and disinfection.
- Properly trained and qualified operators to conduct disinfection were not available.
- Maintenance of one of the Treatment Plants was done in a routine manner.
- Pumping equipment was not routinely inspected (treatment plants, tube wells and booster stations). Maintenance was not done in a planned manner.
- About 130,000 (out of a total of about 160,000) customer connection are metered. 40% of the customer meters are estimated to be not functional. Approximately, 35,600 meters are immediately needed for new installation or replacement.
- Eight out of the ten branches acknowledged that the state of their networks and appurtenances were not good.
- About 48 % of the network is older than 25 years.
- Most Branches were not undertaking planned leak detection in their networks.
- On an average 70 (18 – 200) repairs in the networks were executed per month.
- The most common hydraulic Network Problems are:
  - Undersized/high head loss,
  - Spaghetti connections,
  - Leaks and Contamination,
  - Unplanned Network,
  - No construction Standards.

- The Customer service at Branches receives approximate 60 (5 – 200) complaints per week. The three most common complaints are:
  - No or limited supply,
  - Leaks & pollution,
  - Un-equal distribution.
- The duration of supply varies from an average of 3 h in rainy season and 1 h 30 minutes in dry season. These vary from Branch to Branch from 1 h to 9h in rainy season and 30 Minutes to 6 h in dry season. Customer connected directly to trunk lines receive up to 24 h/day.
- Branches did not have Operation and Maintenance Plans, Standard Operating Procedures and Emergency Response Plans.
- Branches had not updated drawings of the networks.

### **Waste Water Department**

- The Department has four treatment plants only one of which was functioning/working but was in a bad state of operation. The Department has a fair knowledge about the capacity of treated waste water and the inhabitants connected to the system.
- There are no data available on the Performance of the Plant condition. The last Biological Oxygen Demand (BOD) sampling and test were conducted some 4 years ago.
- The sewer department did not have drawings about the networks and the connection.
- About 93.000 customers are connected to the waste water system.
- The state of the sewer networks and manholes is stated as very bad. Approximate 10 – 20 repairs are done monthly.
- No inspection and schedule for maintenance were carried out.
- A first regular preventive maintenance plan was introduced for the fiscal year 2065/2066.
- No coordination existed between the different wastewater sewerage disposal utilities (KUKL, Municipalities, Bagmati Area Sewerage Project).

### **Water Quality Unit**

- The Unit has a fair knowledge on the production and the availability of water as well as quality of the raw water sources. However, it did not have full knowledge about the executed treatment processes of water supply and waste water.
- Chemical treatment and disinfection was done in 14 locations. Disinfection plants are regularly visited and chlorination processes are supervised.
- Treatment plants are visited regularly, however they are not under the supervision of the Water Quality Unit.
- Generally there is some doubt if “Potable water is supplied according to Water Quality Standards”.
- All Guidelines and Standards for water quality are known.

- The state of laboratory building was found to be unacceptable.
- Laboratory facilities need to be procured and rehabilitated.
- Operation & Maintenance Plans, Standard Operating Policy (SOP) and Operational Manuals were not available.
- Water Quality Unit did not have clear mandate.

### ***Detailed Observations and Assessments***

#### **Raw water intakes, sources and springs**

- Baude Source Intake has been buried by a land slide and needs to be shifted about 300 meters upstream.
- Nhaku Intake is contaminated by the farming community and needs to be therefore shifted about 2 km upstream.

#### **Tube wells and shallow wells**

Tube wells are mostly used during the dry season, however in the water poor areas and in the peripheral area there are also used the whole year.

Water quality of the tube wells is doubtful as almost all contain high iron and ammonium. Also arsenic is present in some of the wells. To our observations, many of the wells contained extremely high levels of sand and silt which is leading to very frequent breakdown of the pumping equipment.

### No of Wells in Service 2008

Branches	Nos	Remarks
MAHANKAL CHAUR	11	
TRIPURESHWOR	5	
BANESHWOR	4	
CHHETRAPATI	3	
MAHARAJGUNJ	21	
LALITPUR	4	
MADHYAPUR THIMI	9	4 new Manohara Gallery wells are not functioning as planned Solar Tube well is not functional
BHAKTAPUR	2	
KIRTIPUR	1	

### Treatment Plants

Twenty seven treatment plants are exist out of which the large ones, Baude, Mahankal Chaur, Bansbari and Tahakhel are in satisfactory or good functional condition. The 22 smaller ones are in deficient functional condition and/or out of service. Of these, Bal Kumari, Jwagal and Sinamangal are now under rehabilitation. Only 13 treatment plants are have any disinfection plants (6 dosing pumps and 7 dripping). Rehabilitation and new installation of disinfection plants is required.

### Reservoirs and Distribution networks

Reservoirs are in operation, except the Katunje Reservoir in Bhaktapur which is not connected to the network.

Repair works and maintenance of the Distribution Networks is affected by the unavailability of spare parts, tools and qualified personnel.

### Waste Water Department

During the reporting period, the Wastewater Department had been provided for the first time a budget for operation and maintenance. However, due to the limited time and budget, only urgent works were executed.

### Water Quality Unit/Central Laboratory

The Central Laboratory had not enough equipment and manpower for the execution of the Water Quality Tests according to the Standards.

### Tanker Unit

The Tanker Unit consist of some 17 Tankers in different state of service. Almost all tankers are beyond their economical service life. In addition, tankers are rented from Roads

Department and private tanker services. Water is delivered on request from the customers as well as from the Branch Managers. Free public distribution as well as private tanker supply is carried out.

In addition, the newly established unit, Low Income Consumer Unit (LICSU), has acquired three water tankers from financial support of ADB TA 4776 to supply water to community tapstands.

### ***Present Operation of the Service System***

Production figures of raw water are primarily from estimates based on historical data. KUKL has now prepared a list of installation points for production meters and their specifications and they are now under tendering procedures.

### **Raw water intakes, sources and springs**

Baude intake has been temporary reinstalled, however the intake must be shifted as the landslide problem remains due to the newly constructed road into the Shivapuri National Park.

Raw water intakes are regularly inspected, cleaned and maintained.

### **Tube wells and shallow wells**

New wells have been sunk in Damaichaghat, Koteawor, Mahohara (Pepsi) and Tyanla Phant at Kirtipur but electric connections have not yet installed due to lack of funding.

Submersible- and horizontal pumps as well as equipment for pumping stations are under tendering process. Thus pumps are urgently needed before the next dry season for replacement as well as for new installation. Others are stand-by pumps to be available in case of breakdown of the equipment.

Pumps have being repaired, replaced and newly installed in:

<b>No of Pumps in Service Since 13. Feb</b>	<b>Submersible Pumps</b>	<b>Booster Pumps</b>	<b>Remarks</b>
New installed	5	-	
Replaced	9	2	
Repaired	2	5	

Alternative provision during electricity load shedding has been made with installation of direct feeder lines at the following units:

- Sundarighat treatment plant
- Tube well BB-1
- Tube well MK 1
- Bode treatment plant

Similarly, generators have been repaired and installed at the following units:

- MK-4 (200 KVA)

- BB-2 (430 KVA)
- Shankha Park Well ( 100 KVA )

### **Trunk mains**

A program for the reduction of water losses have being formulated for the trunk mains according to the Licence requirements. Systematic surveys of leaks have being started as well as their repair. The installation of water meters is foreseen at all consumers receiving 24 h water. 15,000 consumer water meters have been specified and are under tender procedure from ADB funding. In addition, KUKL intends to purchase 10,000 water meters from his own financial resources subject to the availability of funding.

### **Treatment Plants**

Treatment plant in new Tahakhel Reservoir has been upgraded.

Balkumari and Jwagal are under new construction through the UNICEF disaster preparedness program.

A Water Treatment Specialist has assisted in the evaluation of the existing treatment and disinfection facilities and in the preparation of an urgent measures plan. The specialist also recommended a number of measures which are now under consideration.

The treatment Plant at Sinamangal is under rehabilitation. Assessment of the works have being done and will be executed when funds are available.

Minor maintenance works have started at most of the major treatment plants.

### **Reservoirs and Distribution networks**

Reservoirs in Manankal Chaur have been tested on their performance. Further investigations are necessary on the water loss (estimated at some 45 m<sup>3</sup>/h).

For the dry season program, the installation of Poly Tanks of some 29 No. of 5000 l and 2000 l has being done. LICSU has, since its commencement, constructed or rehabilitated 101 community tapstands and storage tanks,

In addition, the following service improvements have being done:

- Installation of 48 Injection Points for water into the networks
- Private tanker Service
- Publishing of supply schedule (valve operation schedule)
- On leakage control, a task force was formed within the Technical Division which has started working from end of April. The task force is auditing all water supply plants, mainly treatment plants, well fields, reservoirs and pumping station on unnecessary water wastages. Repair programs under the branches are carrying out the necessary repair and correction. Where necessary, works will be sub-contracted to companies.

### **Waste Water Department**

Waste water department has repaired the channel of Sallaghari treatment plant at the inflow site. Plans to clean the treatment plants will be executed after rainy season.

Spare parts for the flushing equipment have been received and de-blocking is done as required.

A workshop with JICA on decentralised treatment was conducted.

### Water Quality Unit/Central Laboratory

A monitoring program was formulated by the Water Quality Unit and the Plan has been implemented from May 2008. The Unit is presently focusing on the control of free residual chlorine, iron and ammonium.

The Water Quality Unit carried out free residual chlorine tests of the distribution network with different branches. A summary for the month of Asar 2065 is presented below.

### Free Residual Chlorine in Distribution Network:

Month: Ashad 2065 (June-July 2008) [31 Day]				
No	Branch	Total No of samples	Residual Chlorine [ $>0.1$ ]	No. of Test failed
1	Mahakal Chour	70	64	6
2	Maharajguni	84	84	0
3	Baneswor	34	11	23
4	Kamaladi	47	10	37
5	Chetrapati	26	10	16
6	Tripureshwor	132	78	54
7	Bhaktapur	35	35	0
8	Madhayapur Thimi	99	99	0
9	Lalipur	49	33	16
10	Kirtipur	4	3	1
		580	427	153
		per day 19	73.6 %	26.4 %

During the reporting period, total chlorine and bacteriological tests carried out are as follows:

Analyses/Test	Total Number of Test	confirmation of Total Chlorine [traces & $> 0,1$ ]	No Chlorine Detection
Residual Chlorine	533	401 (75.2%)	132 (24.7 %)
Remarks:	From 13 February till 15 May on average only 4.4 Samples were taken per day.		
Analyses/Test	Total Number of Test	Confirmation of non Coli forms [Nil]	Coli forms Detected
Coli forms [100ml]	286	189 (66 %)	97 (34 %)

<b>Remarks:</b>	Increased sampling since 12 May to approximate 10 samples/day
-----------------	---

Similarly, the water samples were analyzed for the following parameters.

<b>Analyses in</b>	<b>WHO Guidelines</b>	<b>Total samples</b>
<b>Turbidity</b>	< 5 NTU	250
<b>Colour Hazen</b>	< 15 units	258
<b>pH</b>	< 6.5 – 8.5	257
<b>Total Alkalinity</b>	30 – 60 mg/l	257
<b>Total Iron</b>	< 0.3 mg/l	257
<b>Iron as NH<sub>3</sub></b>		257
<b>Chloride</b>	250 mg/l	258

The Central Laboratory has received some minor equipment. However this is far from what is needed for the execution of the Water Quality Test according to the Standards.

Free residual Chlorine is sampled and tested on a regular basis.

As an intermediate measure, transport has being hired for the unit.

#### **Tanker Unit**

The Tanker Unit will receive some 10 new Tankers under the ADB funding. Plans will be worked out (Tanker Plan) to improve the performance of the Unit.

The tanker operations during the reporting period are as follows:

<b>No</b>	<b>Description</b>	<b>Feb - Mar</b>	<b>Mar - Apr</b>	<b>Apr - May</b>	<b>May - Jun</b>	<b>Jun - July</b>
		<b>Falgun</b>	<b>Chaitra</b>	<b>Baisakh</b>	<b>Jestha</b>	<b>Asar</b>
1	Injection Points Installed	189	163	262	193	74
2	Tanker Vehicles for Distribution	151	355	412	480	189
3	Tanks Installed	250	179	427	408	253
	<b>Total</b>	<b>590</b>	<b>697</b>	<b>1101</b>	<b>1081</b>	<b>516</b>

### **Low Income Consumer Support Unit (LICSU)**

Low Income Consumer Support Unit (LICSU) dedicated to serve the poor consumers was established under the Technical Department of KUKL. The summary of activities carried out by LICSU under support from the ADB TA 4776 is presented in the following table.

**Key Activities Completed under LICSU under support from ADB TA 4776**

	<b>Key Outputs</b>	<b>Activities Undertaken/ Completed</b>
1	Preparation of Community Participation Strategy (CPS)	<ul style="list-style-type: none"> <li>• CPS prepared in May 2008</li> </ul>
2	Piloting Community Tapstand Program	<ul style="list-style-type: none"> <li>• 73 rehabilitated, 19 new construction and 9 storage tanks handed over to communities</li> <li>• Covered 29 squatter communities, 49 slum areas, 18 poor rental areas and 3 religious sites</li> <li>• Benefitted population – 15,300 and benefitted households – 2,523 (excluding 3 for religious purposes)</li> <li>• Average cost – approx. NRs 70,000 (US\$ 1000), 53% for civil works and 47% for storage tanks</li> <li>• Per capita cost – NRs 445 (US\$ 6.5)</li> <li>• Per household cost – NRs 2,725 (US\$ 39)</li> <li>• Three water tankers procured for LICSU water services</li> </ul>
3	Pro-poor Advisory Services	<ul style="list-style-type: none"> <li>• Draft LICSU Plan covering the strategy, policy and procedure of LICSU operations was prepared in May 2008</li> <li>• Various pro-poor P &amp; P included in LICSU Plan</li> <li>• Constitution of WUG and tapstand MOU/agreement prepared and approved by KVWSMB</li> </ul>
4	Monitoring and Evaluation (M & E) Program	<ul style="list-style-type: none"> <li>• Key informant survey carried out before tapstand implementation to assist in M &amp; E later</li> <li>• M &amp; E of completed tapstands ongoing by LICSU</li> </ul>

5	Capacity building of Low Income Consumer Support Unit (LICSU)	<p>LICSU established and in operation within KUKL</p> <p>Following workshops/trainings held:</p> <ul style="list-style-type: none"> <li>• Stakeholder consultations in 2 March 2007 and 13 December 2008</li> <li>• Pro-poor and gender sensitization training to 30 KUKL staff in June 2008</li> <li>• GIS training to 5 KUKL staff in June 2008</li> <li>• GIS database of base map, slum/squatter, KUKL network updated and compiled</li> <li>• Computer training to 2 LICSU/KUKL Staff</li> <li>• Five computers, one printer and one scanner procured under TA for LICSU use</li> <li>• One van and two motorcycles procured under TA for LICSU activities</li> </ul>
---	---	--

### **Procurement under Project Management Unit (PMU)**

The following packages are in the process of detailed design and tendering under ADB funding:

#### Works Packages:

- Demonstration Area Works Package in Baneshwar
- Immediate Improvement Works Package 1
- Immediate Improvement Works Package 2

#### Equipment Packages:

- Water Revenue Meters
- Spare Pipes and Fittings
- Tools and Equipment
- Bulk Meters, Ultrasonic flow meters and appurtenances
- Tankers
- Pumps for Manohara Infiltration Gallery (4 Nos)
- Pumps and spares for Pharping pumping station
- Pumps and equipment (Replacement) for tube well and other pumping centres

## OPERATIONAL DATA/STATUS

### *Major Reservoir Capacity (Larger than 500 m<sup>3</sup>)*

S.N	Reservoir	Branch	Capacity (m <sup>3</sup> )	Date of Commissioning
1	Mahankalchaur	Mahankalchaur	4500	1966
2	Mahankalchaur	Mahankalchaur	4000	1974
3	Bansbari	Maharajgunj	2000	1986
4	Maharajgunj	Maharajgunj	4500	1895
5	Balaju	Maharajgunj	3600	1930
6	Sundarighat	Tripureswor	800	1971
7	Bhajangal	Kirtipur	850	1896
8	Saibu	Lalitpur	2700	1978
9	Saibu	Lalitpur	2700	2005
10	Tahakhel 1	Mahankalchaur	600	1971
11	Tahakhel 2	Mahankalchaur	500	1992
12	Minbhawan Overhead Tank	Baneswor	3008	2005
13	Anamnagar Overhead Tank	Baneswor	2700	2005
14	Bansbari	Bhaktapur	2500	1897
15	Katunje	Bhaltapur	2000	1986
16	Bode	Thimi	1000	1986

## *KUKL Network*

### Transmission Mains

System	Size, mm	Material	Age (yrs)	Approximate Length (km)
Balaju	100-400	CI, GI	Up to 78	40
Bansbari	150-250	CI, PVC	Up to 113	32
Sundarijal	400-600	CI, PVC, DI	Up to 42	60
Pharping	200-350	CI, DI	Up to 27	27
Chapagaon	150-200	HDPE, CI, DI	Up to 32	36
Kirtipur	100-200	CI, GI, DI	Up to 112	10
Nakhu	200-300	HDPE, CI, DI	Up to 20	9
Bhaktapur	100-200	CI, DI	Up to 110	6
Bode	200-350	CI, CI, PVC	Up to 17	15
			<b>Total</b>	<b>235</b>

### Distribution Mains

System	Size, mm	Material	Age (yrs)	Approximate Length (km)
Original	50-600	CI, GI	Up to 100	300
1983	100-400	CI, GI	25	120
1989	100-400	CI, GI, DI	20	150
1991	100-400	GI, DI	18	150
1997	80-200	DI	10	15
2000	80-200	DI	8	12
Various periods (annual budget)	50-100	GI	Up to 25	120
			<b>Total</b>	<b>855</b>

**Water Production Report (Estimate)**  
**Falgun 2064 (February/March 2008)**

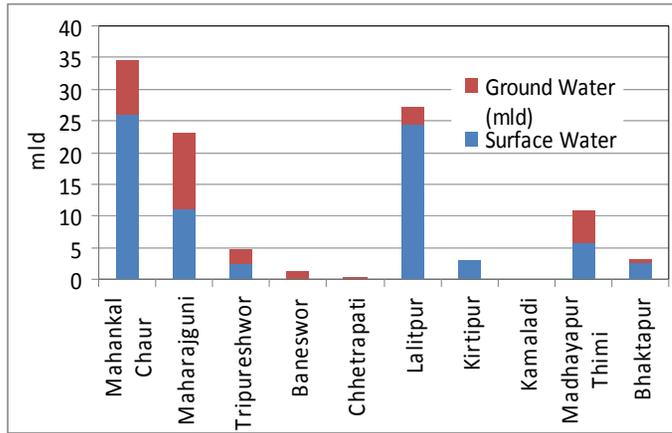
Branch	Mahankal Chaur	Maharajguni	Tripureshor	Baneswor	Chhetrapati	Lalitpur	Kirtipur	Kamaladi	Madhaya-pur Thimi	Bhaktapur	Total
Surface Water	26.0	11.0	2.5	0.0	0.0	24.5	3.0	0.0	5.6	2.8	75.4
Ground Water	8.5	12.0	2.2	1.3	0.3	2.8	0.0	0.0	5.2	0.5	32.8
Total [mld]	34.5	23.0	4.7	1.3	0.3	27.3	3.0	0.0	10.8	3.3	108.2
<b>Falgun(30d) [ml]</b>	<b>1035.0</b>	<b>690.0</b>	<b>141.0</b>	<b>39.0</b>	<b>9.0</b>	<b>819.0</b>	<b>90.0</b>	<b>0.0</b>	<b>324.0</b>	<b>99.0</b>	<b>3246.0</b>
<b>Chaitra 2064 (March/April 2008)</b>											
Surface Water	25.0	10.0	2.5	0.0	0.0	23.0	2.8	0.0	5.5	2.6	71.4
Ground Water	8.0	12.0	2.2	1.3	0.3	2.8	0.0	0.0	5.6	0.6	32.8
Total [mld]	33.0	22.0	4.7	1.3	0.3	25.8	2.8	0.0	11.1	3.2	104.2
<b>Chaitra (30d) [ml]</b>	<b>990.0</b>	<b>660.0</b>	<b>139.5</b>	<b>40.2</b>	<b>10.2</b>	<b>774.0</b>	<b>84.0</b>	<b>0.0</b>	<b>333.0</b>	<b>95.4</b>	<b>3126.3</b>
<b>Baisakh 2065 (April/May 2008)</b>											
Surface Water	24.0	10.0	2.5	0.0	0.0	23.0	2.8	0.0	5.5	2.4	70.2
Ground Water	8.5	12.0	2.2	1.3	0.3	2.8	0.0	0.0	5.6	0.5	33.2
Total [mld]	32.5	22.0	4.7	1.3	0.3	25.8	2.8	0.0	11.1	2.9	103.4
<b>Baisakh (31d) [ml]</b>	<b>1007.5</b>	<b>682.0</b>	<b>144.2</b>	<b>41.5</b>	<b>10.5</b>	<b>799.8</b>	<b>86.8</b>	<b>0.0</b>	<b>344.1</b>	<b>89.9</b>	<b>3206.3</b>

**Jesta 2065 (May/June 2008)**

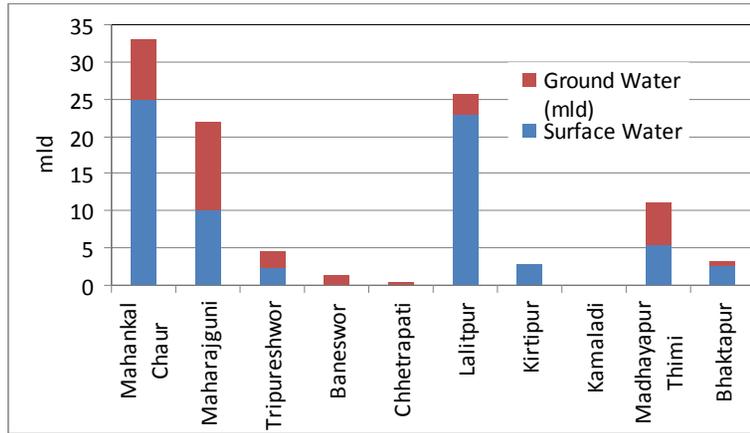
Branch	Mahankal Chaur	Maharajguni	Tripureshwor	Baneswor	Chhetrapati	Lalitpur	Kirtipur	Kamaladi	Madhaya-pur Thimi	Bhaktapur	Total
Surface Water	24.0	10.0	2.5	0.0	0.0	23.0	2.8	0.0	5.0	2.0	69.3
Ground Water	8.1	12.1	2.1	1.4	0.3	2.9	0.0	0.0	5.2	0.6	32.6
Total [mld]	32.1	22.1	4.6	1.4	0.3	25.9	2.8	0.0	10.2	2.6	101.9
<b>Jestha(32d) [ml]</b>	<b>1027.5</b>	<b>705.6</b>	<b>147.5</b>	<b>43.8</b>	<b>10.9</b>	<b>828.2</b>	<b>89.6</b>	<b>0.0</b>	<b>325.8</b>	<b>82.6</b>	<b>3261.4</b>

**Ashadh 2065 (June/July 2008)**

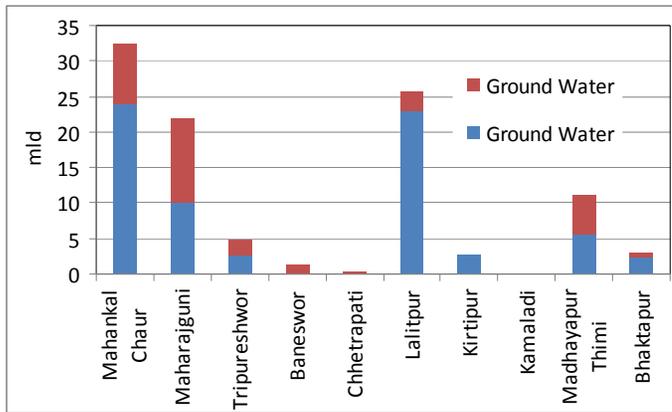
Surface Water	36.0	29.5	2.5	0.0	0.0	23.5	2.8	0.0	6.0	4.0	104.3
Ground Water	10.1	14.6	2.6	1.7	0.4	3.6	0.0	0.0	6.5	0.7	40.3
Total [mld]	46.1	44.1	5.1	1.7	0.4	27.1	2.8	0.0	12.5	4.7	144.6
<b>Ashadh(31d) [ml]</b>	<b>1430.3</b>	<b>1366.5</b>	<b>159.3</b>	<b>52.1</b>	<b>13.0</b>	<b>840.1</b>	<b>86.8</b>	<b>0.0</b>	<b>386.9</b>	<b>146.3</b>	<b>4481.4</b>



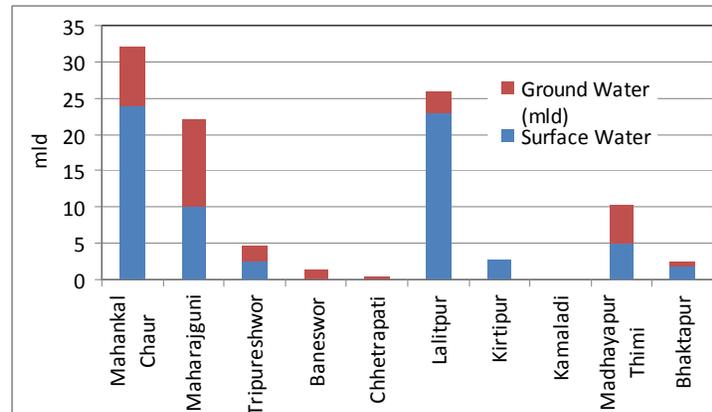
Water Production Report - Falgun 2064 (Feb./March 2008)



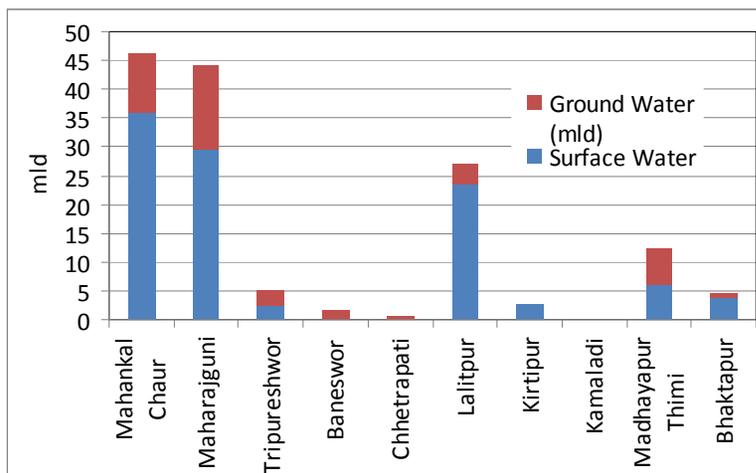
Water Production Report - Chaitra 2064 (March/April 2008)



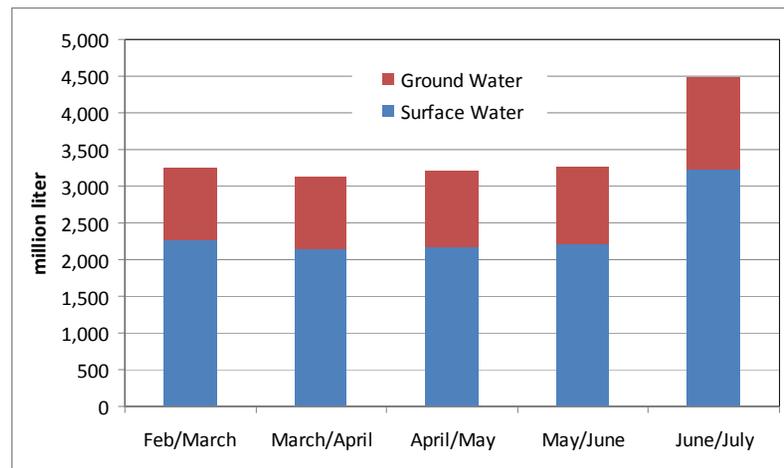
Water Production Report - Baisakh 2065 (April/May 2008)



Water Production Report - Jestha 2065 (May/June 2008)



Water Production Report: - Ashadh 2065 (June/July 2008)



Monthly Production

A month-wise summary in present below:

	Feb/March	March/April	April/May	May/June	June/July
<b>2064 (2008/09)</b>	<b>Falgun</b>	<b>Chaitra</b>	<b>Baisakh</b>	<b>Jesta</b>	<b>Ashadh</b>
Surface Water (ml/month)	2,262	2,142	2,176	2,218	3,233
Ground Water (ml/month)	984	984	1,030	1,044	1,248
<b>Total (ml/month)</b>	<b>3,246</b>	<b>3,126</b>	<b>3,206</b>	<b>3,261</b>	<b>4,481</b>
m <sup>3</sup> /month/connection	20.288	19.539	20.040	20.384	28.009
m <sup>3</sup> /day/connection	0.676	0.651	0.646	0.637	0.904
Estimated 160,000 customer connection					

**Branch Report 13 February to 15 July 2008**

		<b>Injection Points</b>	<b>No. of Tanker</b>	<b>Tanker per Day</b>	<b>No. Tanks</b>	<b>No. of Leaks</b>	<b>Pipe</b>	<b>No. of new Tap</b>	<b>Connection</b>	<b>New meter</b>	<b>Meter</b>
	<b>Branch</b>	<b>installed</b>	<b>distributed</b>	<b>average</b>	<b>installed</b>	<b>repaired</b>	<b>repaired</b>	<b>installed</b>	<b>Changed</b>	<b>installed</b>	<b>repaired</b>
1	Mahankal Chaur	6	926	7.7	0	266	235	201	121	230	115
2	Maharajguni	6	363	3.0	0	356	5	218	166	501	121
3	Baneswor	10	1152	9.6	1	329	15	261	146	297	342
4	Kamaladi	2	70	0.6	0	117	3	14	18	83	35
5	Chhetrapati	7	387	3.2	1	62	12	15	48	137	98
6	Tripureshwor	4	324	2.7	7	292	314	20	39	63	63
7	Bhaktapur	1	246	2.1	3	65	10	52	33	0	10
8	Madhayapur Thimi	0	167	1.4	0	110	3	112	17	209	63
9	Lalitpur	9	545	4.5	9	466	10	339	137	81	221
10	Kirtipur	3	317	2.6	0	50	0	51	11	5	22
	<b>Total</b>	<b>48</b>	<b>4497</b>	<b>37.5</b>	<b>21</b>	<b>2113</b>	<b>607</b>	<b>1283</b>	<b>736</b>	<b>1606</b>	<b>1090</b>

*Number of connections*

	Branch	Government Connection		Private Connection		Public Taps	Total
		Metered	Un-metered	Metered	Un-metered		
1	Tripureswor	187	114	16,123	2,461	137	19,022
2	Chetrapati	42	9	10,842	1,833	180	12,906
3	Maharajgunj	50	51	22,904	2,028	173	25,206
4	Mahankalchaur	73	45	20,284	3,905	137	24,444
5	Baneswor	94	17	21,102	1,182	32	22,427
6	Kamaladi	145	30	5,321	221	20	5,737
7	Lalitpur		32	28,378	3,744	314	32,468
8	Bhaktapur	28	11	7,336	410	203	7,988
9	Thimi	18	6	4,824			4,848
10	Kirtipur	10		5,231	114		5,355
	<b>Total</b>	<b>647</b>	<b>315</b>	<b>142,345</b>	<b>15,898</b>	<b>1196</b>	<b>160,401</b>

## ON-GOING PROJECTS

	<b>Name of Project</b>	<b>Target</b>	<b>Cost of Project (Rs)</b>
<b>1</b>	<b>Production</b>		
1.1	Kotesworm Tyanglaphat, Sinamangal, Kanya Mandirm Koteswor Tubewell Connection*	4 mld	17,500,000
1.2	Khadga Bhadrakali Water* Supply (Tube well)	1 mld	2,736,000
1.3	Mahankal Water Supply (Tube well)	1 mld	5,213,000
1.4	Muldole Water Supply (Tube well)	1 mld	4,000,000
1.5	Sangle Khola Water Supply (Tube well)	1 mld	2,100,000
<b>2</b>	<b>Distribution Network Extension</b>		
2.1	Omkar Marg Pipeline*	700 m	2,096,000
2.2	Gywalinda Water Supply	2,898 m	4,160,000
2.3	Dhumbarahi Water Supply	1,638 m	4,810,000
2.4	Kirtipur Pipeline	588 m	742,000
2.5	Kharipati Water Supply	500 m	824,000
2.6	Community Pipeline	25,000 m	2,200,000
<b>3</b>	<b>Sewarage</b>		
3.1	Boharatar Sewerage System	300 m	302,000

Note: \* advanced stage for commissioning

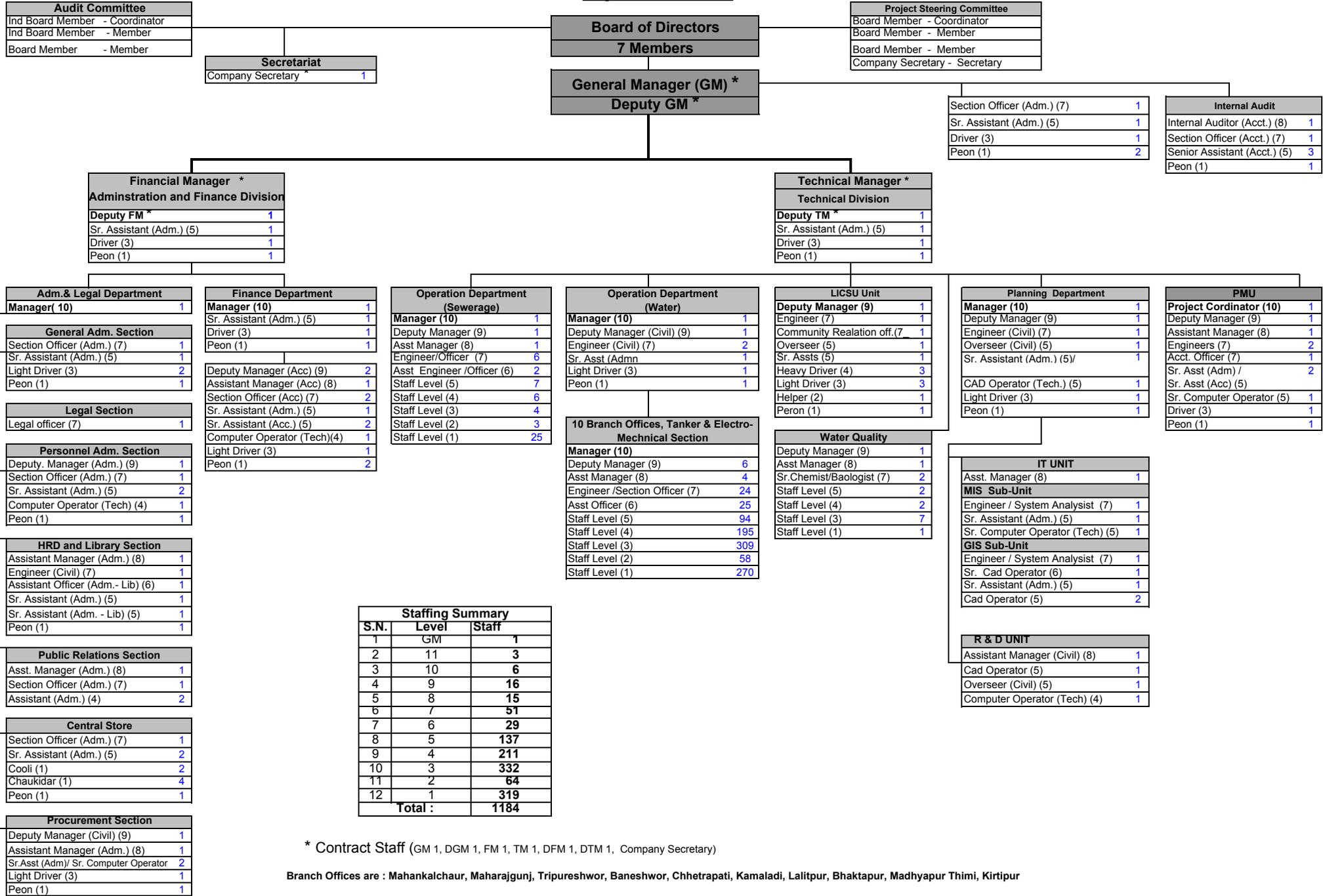
---

## **HUMAN RESOURCES**

---

# Kathmandu Upatyaka Khanepani Limited

## Organization Chart



## ***Trainings***

The following training were conducted during the reporting period:

<b>S.N.</b>	<b>Trainings</b>	<b>Date</b>	<b>No's of Participants</b>	<b>Remarks</b>
1	Change Management Orientation	May-08	50	Completed.
2	LICSU(Sensitization on Pro-poor and Gender Issues	Jun-08	30	Completed.
3	Introduction to GIS and Hydraulic network, modeling	Jul-08	5	Completed.
4	Change Management Orientation Program (Grade 5-7)	July/Aug 2008	285	Completed.
5	Non Revenue Water	July 2008	2	Completed

Similarly, the following training programs are planned.

<b>S.N.</b>	<b>Trainings</b>	<b>Date</b>	<b>No's of Participants</b>	<b>Remarks</b>
1	Unaccounted for Water (UFW) and Leak Detection Training.	Aug-08	48	Completed.
2	Basic Assessment and Monitoring of Water Quality	July/Aug 2008	40	Completed.
3	Basic Plumbers Training	Aug/Sep 2008	100	Ongoing
4	Basic Water Treatment Process Training	Aug/Sep 2008	20	Completed.
5	Emergency WASH training with focus on recurring emergencies	August 2008	3	Financed and organized by UNICEF
6	Concept and principles of ecological sanitation	September 2008	1	Workshop financed and organized by WHO

## FINANCIAL STATUS

### Kathmandu Upatyaka Khanepani Limited

#### Balance Sheet

As at 31<sup>st</sup> Ashad, 2065 (15<sup>th</sup> July, 2008)

	Schedule	Current Year	Previous Year
<b>Capital &amp; Liabilities:</b>			
Company's Fund	1	56,857,269.00	17,850,000.00
Current Liabilities & Provision	3	1,500,574,403.04	165,000.00
<b>Total</b>		<b>1,557,431,672.04</b>	<b>18,015,000.00</b>
<b>Assets:</b>			
Assets	4	26,183,821.04	-
Pre - Operating Exp.			325,000.00
<b>Total (A)</b>		<b>26,183,821.04</b>	<b>325,000.00</b>
<b>Current Assets:</b>			
Debtors	6	109,391,290.66	-
Advances	7	951,953,554.88	-
Stock in Hand	8	142,849,633.63	-
Cash & Bank Balance	9	163,829,938.42	17,690,000.00
Receivable Bank Balance		137,159,115.88	-
<b>Total (B)</b>		<b>1,505,183,533.47</b>	<b>17,690,000.00</b>
<b>Net ( Profit ) Loss</b>	<b>Total ( C )</b>	<b>26,064,317.53</b>	<b>-</b>
	<b>Total (A+B+C)</b>	<b>1,557,431,672.04</b>	<b>18,015,000.00</b>

JFin.stat.2065 Ashad (15th July 2008) in English & Nepali[BS]pL

## Kathmandu Upatyaka Khanepani Limited

### Profit & Loss Account

For the year ended 31<sup>st</sup> Ashad, 2065 (15<sup>th</sup> July ,2008)

Particulars	Schedule	Current Year	Previous Year
<b>Income:</b>			
Water & Sewerage Billing (After Rebate)	10	191,801,502.43	
Other Income	10	9,899,092.75	
<b>Total Income</b>		<b>201,700,595.18</b>	<b>0</b>
<b>Expenditure:</b>			
Production	11	43,549,778.13	
Distribution	11	47,300,325.29	
Quality Control	11	3,132,413.59	
Electro-Mechanical	11	5,340,497.39	
Sewerage Operation	11	8,130,807.35	
Consumer Account	11	12,458,097.39	
Administrative	11	32,419,325.57	
Pre-Operating Exp.		325,000.00	
Reserve For Doubtful Debt.		60,510,178.55	
License Fee		4,166,666.67	
Lease Fee		7,672,060.10	
T.F.C.Fee		959,007.51	
<b>Total</b>		<b>225,964,157.54</b>	<b>0</b>
<b>Gross Profit (Loss)</b>		<b>(24,263,562.36)</b>	<b>0</b>
Depreciation Fund	4	(1,800,755.17)	
Net Profit(Loss) Before Tax		(26,064,317.53)	0
Profit (Loss) Transferred to Balance Sheet		(26,064,317.53)	0

]Fin.stat.2065 Ashad (15th July 2008) in English & NepaliBS|pL|

## Kathmandu Upatyaka Khanepani Limited

### Current Liabilities & Provisions

As at 31<sup>st</sup> Ashad, 2065 (15<sup>th</sup> July ,2008)

#### Schedule 3

S.No.	Particulars	Schedule	Current Year	Previous Year
<b><u>Current Liabilities:</u></b>				
1	Sundry Creditors	3(1)	81,351,267.61	165,000.00
2	Sundry Creditors Other Deposit	3(2)	10,995,596.88	
3	New Connection Deposit	3(3)	111,799,000.00	
8	Advance Payment Received		702,202.00	
9	K.V.W.S.M.B.		316,965,181.13	
10	K.V.W.S.M.B. (Debtors)		917,291,969.36	
11	Water Tariff Fixation Committee Charge		959,007.51	
	<b>Total</b>		<b>1,440,064,224.49</b>	<b>165,000.00</b>
<b><u>Provision:</u></b>				
1	Reserve For Doubtful Debts.		60,510,178.55	
	<b>Total</b>		<b>60,510,178.55</b>	-
	<b>Grand Total</b>		<b>1,500,574,403.04</b>	<b>165,000.00</b>

Note: Reserve for doubtful Debts.provision as per actual debtors .