PARLIAMENT
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LIBRARY

MINISTRY OF LOCAL GOVERNMENT

PRESENTATION TO

DEPARTMENTAL COMMITTEE
ON
HEALTH, HOUSING, LABOUR & SOCIAL WELFARE

PERMANENT SECRETARY
MOLG

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WATER AND SANITATION SECTOR

1.0 Introduction

There are 1 city, 45 municipalities, 62 townships and 66 county councils across the country which have major concentration of industrial development activities and human settlement. Over the years the provision of water and other sanitation services in these towns have deteriorated drastically to a level where the essential services of water, sewerage, solid waste management and other environmental related activities do not exist. Out of the sixty-two Municipalities, it is only in three Municipalities that are served with potable and wholesale water to the tune of 80%, the rest of the residents have to use other alternatives. In all the municipalities including Nairobi City Council only less than 40% of their areas of jurisdiction are served with sewerage. Solid waste management services in all these councils are below 15%.

The following are some of the most serious problems facing the water and sanitation sub-sectors:

1.1 Poorly maintained water and sanitation facilities

1.1.1 Weak technical and institutional capacity at the local level

a. lack of sufficient, qualified and experienced technical personnel.

b. poor planning for water and sanitation maintenance activities.

c. poor management of water and sanitation facilities.

d. lack of adequate monitoring and evaluation of existing facilities.

e. inadequate involvement of the private sector in routine and periodic maintenance of water and sanitation facilities.

f. lack of transparency and accountability during procurement of essential operational and maintenance requirements.

g. Failure to address periodic maintenance in time.

1.1.2 Inadequate Finance Resources for water and sanitation programmes:

a. Inadequate revenue base in Local Authorities.

b. Inefficient collection and utilization of resources available to Local Authorities.

c. Mis-allocations of financial resources especially those collected from water and sanitation department.

1.1.3 Water Shortage

a) Inadequate utilization of the existing water facilities.

b) Inadequate staffing in the water sector for effective manning of the infrastructure.

c) Inadequate management of the distribution system.

d) Poor and inefficient meter reading and billing of the water consumers.

e) Improper budgetary system which fail to secure a sound financial base for water operations, maintenance and capital investment.

f) Lack of public awareness about their right of access to potable and wholesome water.

g) Lack of comprehensive national laws to allow for Local Authorities to play an effective role in the provision of potable and wholesome water.

h) Lack of effective involvement of the private sector in the provision of potable and wholesome water.

1.1.4 Inadequate and inefficient sewerage facilities

a) Inadequate utilization of the sewerage facilities in a number of Local Authorities.

b) Inadequate staffing in the sewerage facilities to ensure efficient operations and maintenance of the existing sewerage facilities.

c) Inadequate management of water connections to consumers and ineffective collection network.

d) Poor and inefficient billing of the sewerage services.

e) Lack of public awareness about their right to environmental protection from the effects of untreated sewerage.

f) Lack of effective involvement of the private sector in the sector.

g) Lack of comprehensive national laws to allow for Local Authorities to play an effective role in the provision of the sewerage services and protection of the environment.

1.1.5 Solid waste management

a) low level waste collection rate.

b) lack of collection vehicles/machinery.

c) illegal and uncollected disposal of water.

d) Inefficient institutional and organizational set ups in the Local Authorities.

e) Uncontrolled private sector involvement in solid waste collection and disposal in a number of Local Authorities.

f) Lack of financial resources for operations, maintenance and capital investments.

g) Lack of comprehensive national laws on solid waste management.

2.0 EFFORTS PUT IN PLACE TO ADDRESS SANITATION PROBLEMS IN LOCAL AUTHORITIES

The Ministry of Local Government has put a number of programmes in place over the last decade to address the issues of water and sanitation. These include:

- Development programmes.
- Rehabilitation programmes.
- Kenya Local Government Reform Programme.
- Urban water and sanitation management (UWASAM).
- Small Town Development Project (STDP).

However due to the poor state of water and sanitation facilities in our urban centres and the insufficient funding levels from the donors, these programmes have not been able to address the needs as far as water and sanitation are concerned.

For Local Authorities to be able to provide adequate essential services water on sustainable basis, a programme of adequate and guaranteed funding for routine maintenance (operations and maintenance) and period maintenance (major rehabilitation) will have to be developed and put in place from the Central Government funds under recurrent budget until the restructuring Local Authorities finances under KLGRP are finalized and streamlined and Local Authorities are in a position to finance these services from their own sources.

The proposed water and sanitation maintenance for the existing water and sanitation facilities (water, sewerage, parks and solid waste) is aimed at gradually improving the operations and maintenance of essential services and while boosting the financial capacities for the Local Authorities to undertake routine maintenance through the user charges. It is proposed that mechanisms be put in place to physically enhance Local Authorities abilities to manage the essential services. These mechanisms be identified and implemented through the recurrent budget in order to build capacity for Local Authorities to manage the water and sanitation facilities.

There is need to develop maintenance programme to cover the following:

i) Rehabilitation of Water and Sanitation facilities, and
ii) Capital investment for water and sanitation facilities.

For at least 34 towns (Municipalities and Townships) that require this emergency programme urgently.

NAIROBI SEWERAGE SYSTEM

1.0 INTRODUCTION

1.10 WATER SUPPLY

Over the years the Nairobi City Council has developed a vast infrastructure of water sources, transmission and transfer pipelines and distribution network to serve the city. Starting with Nairobi Dam supply I 1889(later abandoned), Kikuyu springs, Ruiru Dam, Sasumua Dam, Ngethu Treatment works and recently Ndakaini Dam, the Nairobi City Council has installed a production capacity of 519,000m3/d which is estimated to be adequate for the needs of the City up to Year 2007. The current supply into the city is as shown below.

SOURCE	ULTIMATE CAPACITY (m3/d)	SUPPLY INTO THE DISTRIBUTION
KIKUYU SPRINGS	4000	4,000
RUIRI DAM	21,000	13,500
SASUMUA	59,OOO	44,000
CHANIA/NDAKAINI	435,000	348,000
TOTAL	519,000	409,500

2.0 WATER DISTRIBUTION SYSTEM

The City's water distribution network is divided into the upper supply zone and lower supply zone.

The upper supply zone is area west of Uhuru Highway from Upper Hill to Karen, Dogorretti, Ngong Road and adjacent areas. These areas are supplied from Kikuyu springs, Ruiru and Sasumua Dams (the Kabete System). The supply to these areas is partially supplemented by the Ngethu system through pumping.

The Lower supply areas generally include the areas East of Uhuru Highway Including the City Center, Eastlands, Thika Road, Industrial area, Mombasa Road and adjacent areas. The lower supply zone is supplied by gravity from the Chania/Thika Dam supply corridor (the Ngethu System)

3.0 SEWERAGE DEVELOPMENT POLICY

The Sewerage Development Policy of the Nairobi City Council is based on the 1974 Master Plan. The recommendations of the Sewerage Master Plan were tailored first to arrest the deteriorating environmental situation by improving the existing sewerage and drainage network and enhancing the sewerage treatment facilities.

The first phases of the Sewerage construction was undertaken more or less according to the plan, however later, due to constraints in finances at the start of the 1980s, the City Council was not able to keep up with the required construction. During the studies of the Third Nairobi Water Supply Project(TNWP), the 1974 Sewerage Master Plan was reviewed and it was recommended that the Master Plan be Updated. During the implementation of the TNWP in the late 90's, the Sewer Master Plan was also reviewed. The short term and long term investments requirements were identified in the Master Plan are summarized herein.

3.10 EXISTING SEWERAGE SYSTEM.

Nairobi has mainly a partially separate system of sewers and a combined system within the Central Business District. The drainage area served by the **combined** system is about 125 hectares and the mains length in this area is 14 kilometers. It is fortunate that with the exception of Karen, Langata and Kahawa areas, the whole of the area within the City Boundary can be drained by gravity to the major Sewerage at Dandora. Adequate land for this purposes was secured for this purpose in during the 70s during the design and construction of Phase one of the treatment works.
The total length of sewerage system in the City is approximately 700 kilometers out of which 153km are the trunk mains and covers an area of approximately 208 square kilometers.

The status of Sewers in the CBD, western parts of the City, and parts of East Lands are in fair condition. However in most parts of the Eastlands, river valleys where settlements has taken places the sewerage system is not functioning as expected mainly because of the following factors:

- Encroachment of sewers wayleaves by developers , construction on top sewers
- Overflow of sewer due to insufficient capacities especially where high-rise buildings have replaced single dwelling units e.g. Mathare North, Umoja e.t.c.
- Blockage of sewers for irrigation purposes

- Vandalism of manhole covers and frames
- Dumping of solid wastes into sewerage system.

4.0 SEWERAGE TREATMENT WORKS

Nairobi City is well drained by the Nairobi River and the Ngong River systems, thus making it possible to treat most of the wastewater in a centralized place. During the 1974 Sewerage Master Plan Study, Ruai was identified as the most suitable site to locate a central sewage treatment Plant. Adequate land to Carter for the City Waste water Land Requirement up to 2020 was set aside for this Purposes and Phase 111 of Sewage Treatment works was designed during the Update of the Master Plan in 1998.

At present there are more than twenty sewage treatment works in Nairobi, the major ones being Dandora and Kariobangi Sewage Treatment works respectively. The estimated treatment capacity of the sewage treatment works is130,000 m3 per day. The estimated wastewater generated is estimated to be 228,000 m3 per day. This indicates that approximately of 108,000 m3 per day the wastewater is treated on-site and part of it discharged directly to the watercourses.

The table indicates the treatment capacity of the treatment works

TREATMENT WORKS	Design Capacity M3/d	Current flows
Dandora Estate Sewage Treatment Works	95,000	42,000
Kariobangi Sewage Treatment Works	32,000	31,000
Total	**127,000**	**73,000**

5.0 ON- SITE SANITATION- PLANNED AREAS

A large proportion of Nairobi's population practices on-site sanitation. For some areas, like Muthaiga, Lavington, Karen, e.t.c, the installation of septic tanks, cesspits and conservancy tanks has proved to be adequate.

The Nairobi City Council operates a fleet of exhauster service vehicles to serve these areas including the Peri-urban areas. A policy of involving the private sector to provide this service has been developed and some

entrepreneurs are already providing this service in the City and Peri-Urban areas.

6.0 INFORMAL SETTLEMENTS

Due to about three decades of unfavorable economic conditions, under investment in Urban Infrastructure and unparalleled natural growth rates coupled with rural-urban migration, informal settlements accounts for an estimated 55% of the total population of Nairobi and occupy only 5% of the Residential area. There are more than 50 informal settlements scattered allover the City the biggest one being Kibera. Most of the informal settlements have no legal tenure – structure owners have quasi-legal right of occupation. They are characterized by limited access to infrastructure and services – water, solid waste collection, health, access routes, education e.t.c.

However, they are the primary labor pool for industrial, commercial, domestic and service sector. These are the gateway to Nairobi for many rural- urban migrants. The informal settlements, posses the biggest challenge to the City Council in terms of service provision. There is therefore an urgent need to address this sorry state of affairs in a holistic way which should involve all the stakeholders e.g Provincial Administration, Nairobi City Council and Politicians.

7.0 FINANCING

Financing of Sewerage systems is quite expensive and the trunk infrastructure has tended to depend on donor financing. For the last 15 years, emphasis was laid on the development of water infrastructure under the Third Nairobi Water Supply Project. It was anticipated that with the completion of the TNWSP, the next major investment would be geared to address Sewerage and Sanitation issues. This was never realized because donors suspended financing in the Water Sector. Internally funds are currently being used to finance some sewer rehabilitation works.

8.0 INVESTMENT REQUIREMENTS

In order to fully address, Sewerage, drainage and Sanitation problems in the City up to the year 2020, the following investments are required:

INVESTMENTS	2000-2005	2005-2010	2010-2020
SEWERS – Million Kenya Shillings(M ksh)	11,732	7,975	4,373
SEWAGE TREATMENT WORKS- M Ksh	6,959	3,640	1,960
DRAINAGE WORKS- M K sh	187	511	1,830
SANITATION- M Ksh	136	50	50
TOTAL – M Ksh	**7,282**	**8,536**	**8,213**

These costs do not include the operations and maintenance cost and is based on price level prevailing on January 1st 1997.

9.0 MAIN CHALLENGES IN THE PROVISION OF SEWERAGE SERVICES

(i) Inadequate financial allocation to Implement the Sewerage Master Plan as recommended in 1974 and the 1998 updated one.

(ii) Inadequate financial resources to Maintain/ renewal and rehabilitated the existing Sewerage facilities.

(iii) Misuse of the Sewerage System through Urban irrigation, vandalism of Sewer Manhole covers.

(iv) Overflowing of sewers due to insufficient capacities especially in areas currently undergoing redevelopment.

(v) Encroachments of the Sewer Way leave.

(vi) Informal settlement areas where there is a multiple of actors wrestling for control e.g Provincial Administration, politicians, City Council, NGO'S, Pressure groups e.t.c.

(vii) Lack of regulation of Development in the City
(viii) Lack of Enforcement of the bye- laws
(ix) Allocation of land set aside for sewer development

10 CURRENT INITATIVES TO ADDRESS THE CHALLENGES

(i) Implementing the Sewer Master Plan short term Recommendations

using internally generated Revenue.

(ii) Seeking financial Assistance from development Partners.

(iii) Piloting on Water and Sanitation Provision in the Informal settlement.

(iv) Developing policy on informal settlements in the City Through a Coordination committee chaired by the PC.

(v) Implementing a project With Habitat where awareness campaign will be undertaken.

PUBLIC HEALTH DEPARTMENT

INTRODUCTION:

Nairobi City has a population of **2,143,254** the majority of whom depend on the Nairobi City Council for their health care. In the council these services are provided through the department of Public Health, Water and Sewerage, Environment and Social Services & Housing.

The top ten causes of mortality and morbidity are as listed:

Mortality	**%**
Pneumonia	31%
Tuberculosis	21%
Cancer	11%
Meningitis	10%
Prematurity	6%
Respiratory Disease	6%
AIDS	5%
Anaemia	5%
Road Traffic Accidents	4%
Total	**100%**

Morbidity	**%**
Respiratory Disease	39.0%
Malaria	16.8%
Diseases of the Skin	9.8%
Diarrhoea	8.5%
Intestinal Worms	5.1%
Accidents	3.7%
Eye Infection	3.0%
Urinary Tract Infection	2.7%
Pmeumonia	2.5%
All Other	8.9%
Total	**100.0%**

NOTE : The above figures refer to year 2000.

VISION:

The Department's vision is to:

- Create an enabling environment for the provision of sustainable quality health care that is acceptable, affordable and accessible to all Nairobians.

4 MISSION STATEMENT

The mission of the Department is to:

- Promote and provide quality, curative, preventive, promotive and rehabilitative health care services to all residents of Nairobi and any others seeking care from us.

CORE FUNCTIONS

The Public Health Department of Nairobi City Council has the following as its core functions: -

1. Preventive health services
2. Promotive health activities
3. Curative health services
4. Rehabilitative health activities
5. Law enforcement
6. Policy formulation in urban health.

PREVENTIVE HEALTH SERVICES:

1.1 Improvement in water and sanitation

1.2 Management of waste disposal (Solid waste and Liquid waste)

1.3 Food hygiene

1.4 E.P.I activities

PROMOTIVE HEALTH ACTIVITIES:

These include:

2.1 Growth monitoring and nutrition

2.2 Health Education

2.3 Home visits and counselling

2.4 Reproductive health services

2.5 Family Planning

CURATIVE HEALTH SERVICES:

These are provided mainly in static facilities namely:

3.1 Clinics

3.2 Dispensaries

3.3 Sub health centres

3.4 Health Centres

3.5 Hospitals

3.6 Mobile clinics

The basic function in these static units being: -

- Diagnosis
- Treatment
- Referral system
- Reproductive health services

4. REHABILITATIVE HEALTH ACTIVITIES:

4.1 Pyschometric assessment

4.2 Running diabetic clinics

4.3 Nutrition rehabilitation programme

4.4 Mental Health services

5. LAW ENFORCEMENT:

Enforcement of legal requirements of Public Health and other related acts.

These include: -

5.1 Inspection of premises

5.2 Issuance of notices

5.3 Arrests

5.4 Prosecution

5.5 Quality control

Notification to MOLG/ MOH/ WHO of all notifiable communicable diseases and any other disease outbreak.

6. **POLICY FORMULATION/ IMPLEMENTATION OF URBAN HEALTH**

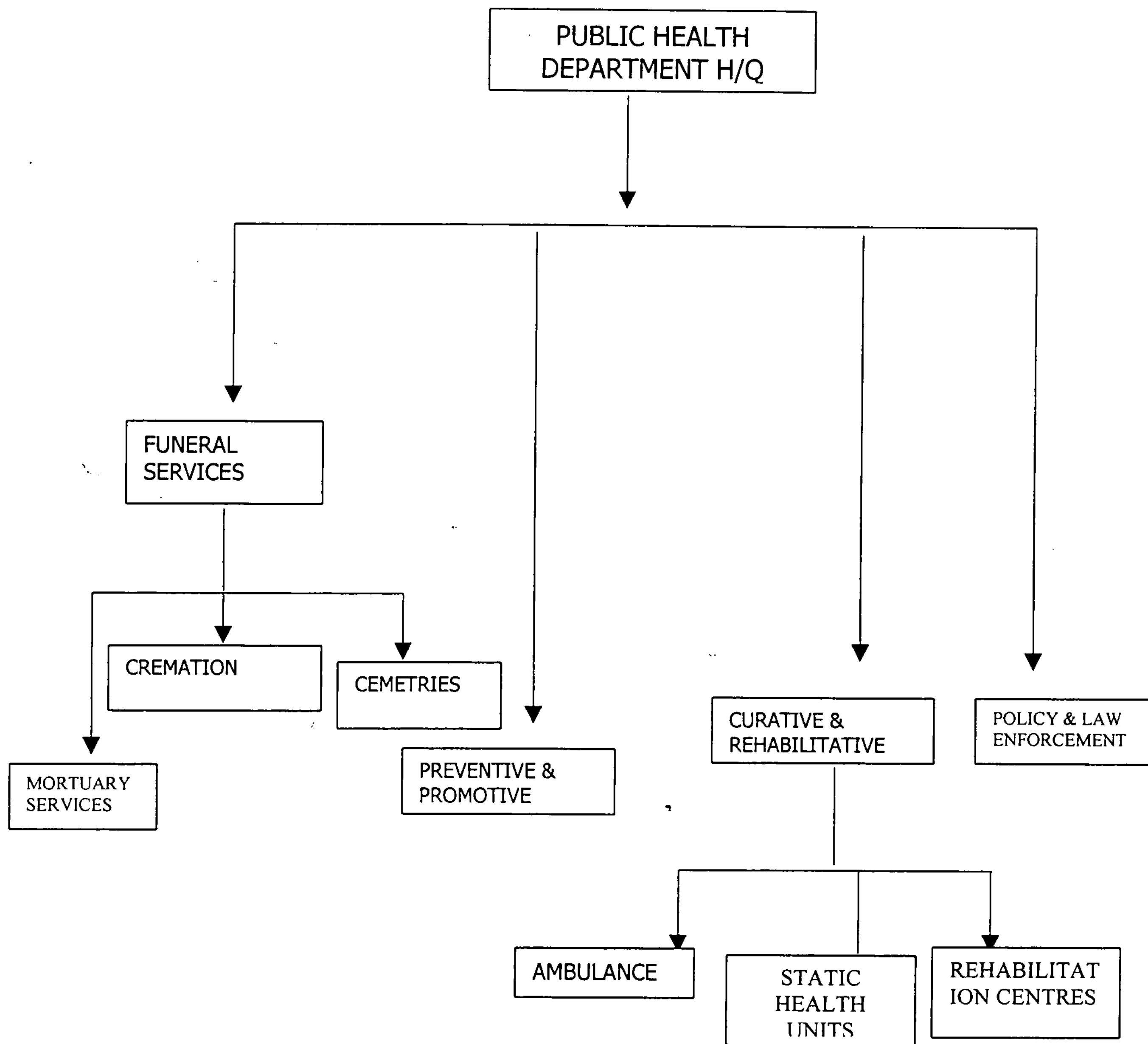
1. Formulation of health policy for Nairobi City Council.
2. Participate in national urban health formulation policies.

B. FUNCTIONAL ORGANIZATION:

To perform the above functions the department is divided into eleven (12) administrative sections, namely: -

1. Division I
2. Division II
3. Central Administrative
4. School Health
5. Special Treatment Centre (STC)
6. Epidemiology Disease Control (E.D.C.)
7. Funerals section
8. Health Inspectorate
9. Pumwani Maternity Hospital
10. Ambulance
11. Post Basic training institutions
12. Nutrition

FUNCTIONAL CHART:



C. STAFFING:

The department is run by a total of 2276 staff members out of which 1557 are technical and 719 are non - technical staff.

The public health staff establishment summary is attached in appendix II.

Below is a summary of Staff categories, Approved establishment posts, In posts and the Vacancies as follows:-

STAFF CATEGORY	APPROVED ESTAB. POSTS	IN POSTS	VACANCIES	REMARKS
Doctors	84	42	42 (36 posts advertised on 16/2/2001)	Need to establish 15 new posts
Nurses	1,061	1005	56 (29 posts advertised)	96 new posts to be established
Public Health Officers/Technicians	71	40	13 (13 posts advertised)	43 to be established
Clinical Officers	52	10	42	22 new posts to be established
Lab. Technologists/ Technicians	35	27	8	45 new posts to be established
Nutrition Officers/ Technicians	41	7	33 (1 post advertised)	17 to be established
Health Administrative Officers	8	32	0	24 new posts to be established
Pharmacist/ Technologists	1	0	1	
Radiographers	1	1	-	3 new posts to established
Cateress/ cooks	5	31	0	26 new posts to be established
Mortuary attendants/ Senior Funeral Attendants	22	17	5	37 new posts to be established
Statistical Assistant	2	4		7 new posts to be established
Clerical Officers	141	182	0	26 new posts to be established
House Keepers	1	6	0	5 new posts to be established
Secretaries	8	8	0	2 new posts to be established
Drivers	15	7	8	

Headmen	0	4	0	4 new posts to be established
Librarians	2	2	0	2 new to be established
Ambulance attendants	4	23	0	18 to be established
Ungraded Nurse	88	306	0	
Telephone operators	5	0	5	
Copy Typists	9	5	4	2 to be established
Labourers	30	119	0	89 to be established
Messengers	6	27	0	21 to be established
Artisans	0	3	0	2 to be established
Domestic staff	137	307	0	170 to be established
Medical Records Officer	1			4 to be established
Asst. Anesthetists	3	1	2	3 to be established
Tutor	4	1	3	2 – Nurse
Medical Records Officer	2	2	0	
Malaria Control Officer	2	2	0	P.H.T.
Asst. Pest	0	2	0	P.H.T
X-Ray Operator	0	2	0	Radiographer
Foreman	0	1	0	
Technical Inspector	0	2	0	Artisans
Asst. Pest Control Officer	58	46	12	

From the above summary chart it is evident that there are shortages of all cadres of staff.

It is recommended that first, all vacant positions be filled, then where extra posts are needed the same be established and recruited.

D. PROCUREMENT OF MEDICAL SUPPLIES

Purchasing of Medical and other supplies are done by the Treasurer's Department (Purchasing Office) and Pumwani Maternity Hospital (Purchasing Office). This is done on the basis of Tender, Quotations, Direct purchase using L.P.O. and petty cash.

The Public Health Department has noticed the following problems: -

i. L.P.O's take too long from purchasing Officer to the intended supplier (even months)

ii. Suppliers or Merchants are not paid in time or even not at all.

iii. Suppliers sometimes are paid for but nothing delivered to the Department (Vacuum Supply)

iv. Deliberate abuse of Procurement System leading to planned artificial shortages intended to create crisis that will lead to fraudulent use of funds particularly in Pumwani Maternity Hospital (PMH)

v. Debt management is a problem.

Possible Way Forward

- Streamline Procurement System
- Streamline Debt Management

E. TRANSPORT

The Department requires about 24 vehicles to effectively manage it's transport problem.

The vehicles will be distributed as follows:-

i	Regional Offices	- 2
ii	Districts	- 8

Projects - a) School Health	- 2	
b) Health Inspectorate	- 3	
c) E.P.I (Disease surveillance)	- 8	to be provided by KEPI/WHO/UNICEF ETC
d) S.T.C	-1	
Total	**24**	

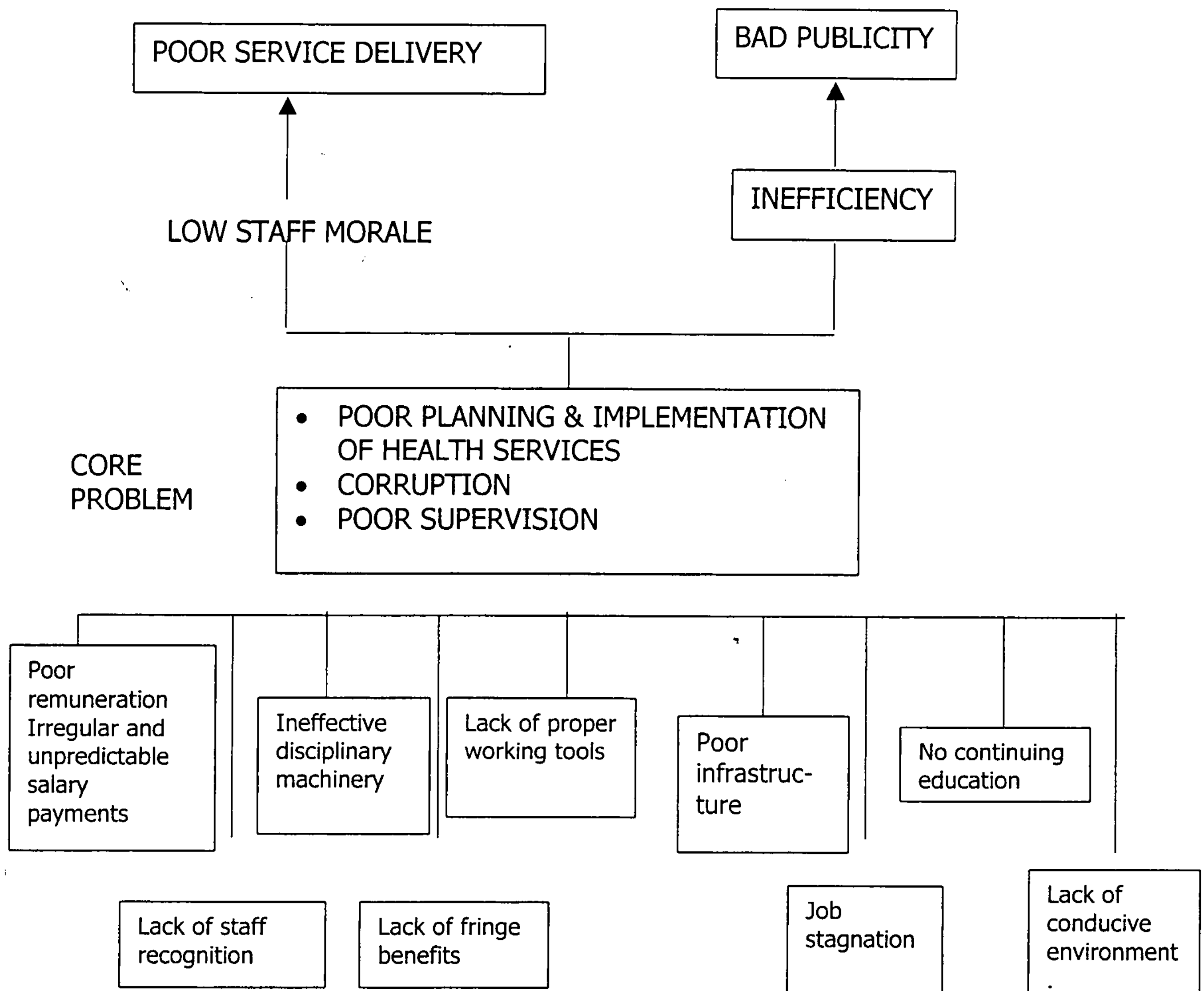
The existing vehicles though serviceable, are aging and will need replacements.

It has been noticed that Council politicians have tended to use PHD transport for their personal and other non-official duties. This needs urgent reversal.

F. CONSTRAINTS AND CHALLENGES

The following is an attempt to analyze the problems facing the department using a problem tree.

PROBLEM TREE:

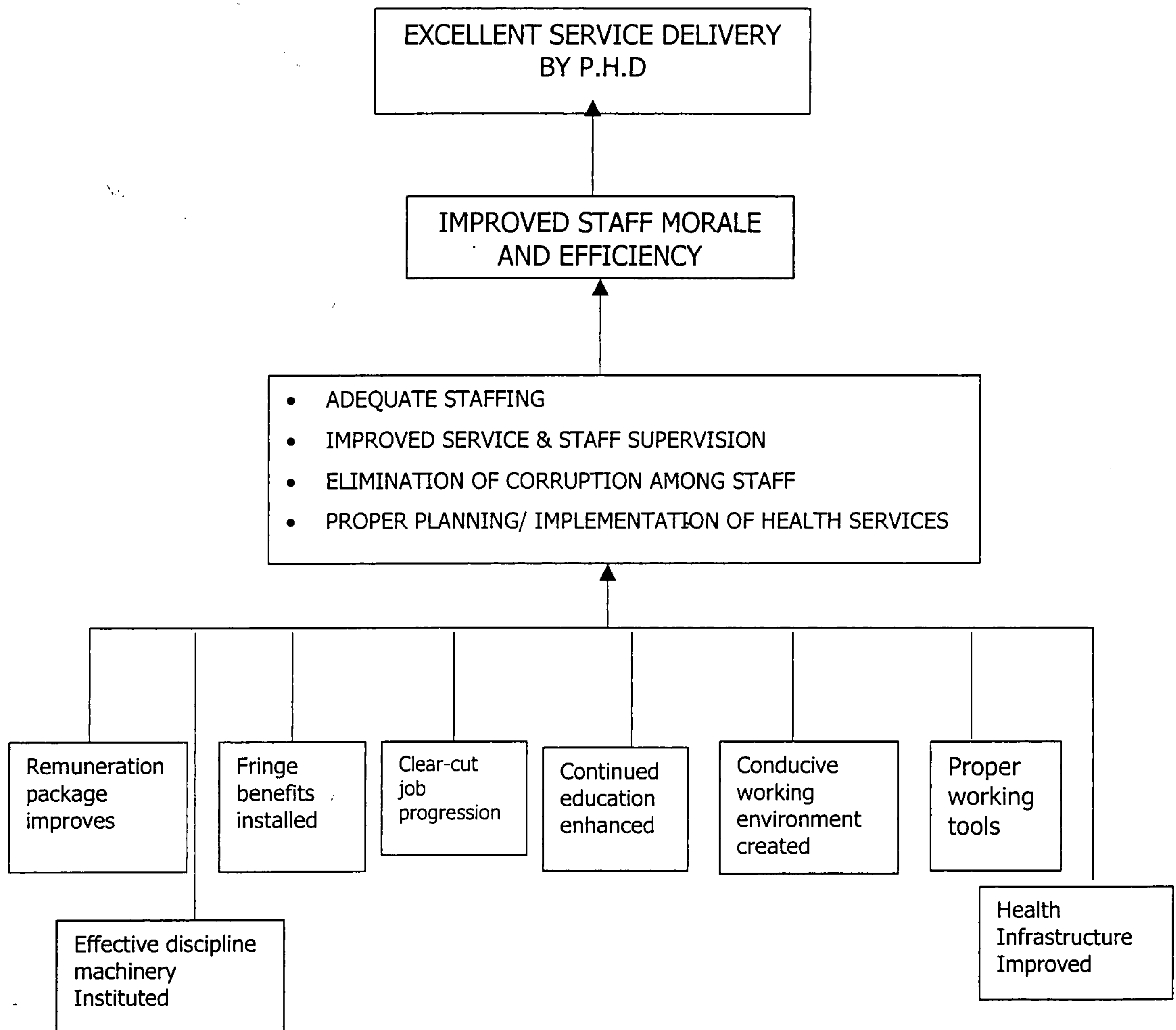


(Appendix 2)

Attached please find an inventory of the current state of the health infrastructure within the department.

After diagnosis of what appears to ail this department an attempt is made to objectively offer solutions.

OBJECTIVE TREE:



With the above objective the department is in the process of making a logical framework and a detailed workplan aimed at getting the desired objectives.

An attempt to improve health infrastructure was done through the World Bank. (Health rehabilitation project/ CR-2310-KE)

Appendix III

In the meantime a lot of effort is being put to work together with all staff to create and improve the working environment and team building.

5 CONCLUSIONS AND WAY FORWARD

This department deals with an important and fundamental aspect of life that has not met the expectations of the city residents. Delivery of health services is being done but quality and even to some extent the quantity of the same leaves a lot to be desired. It is very important that the department realises that it not only has a moral obligation to serve the Narobians but indeed must deliver total quality health care to them.

The worsening economic situation in the country is a major threat to health care delivery.

Lack of purchasing capacity will mean more diseases will not be attended to early enough and adequately resulting in higher morbidity and mortality. There is need therefore to deliberately indulge in primary health care activities that will be cheaper in preventing disease and promoting health thus improving the productivity and economic enhancement of Nairobians.

Personnel is the most important resource that this department has. Every effort will be made to make sure that this resource is adequately and properly utilized. It is important that total staff re-orientation is done so as to direct our focus

towards achieving our set objectives, accomplishing our mission and finally realising our vision.

It is also proposed that for ease of health care delivery Nairobi be divided into eight (8) districts corresponding to the current administrative divisions.

Appendix 3

WORLD BANK PROJECT

THE HEALTH REHABILITATION PROJECT (CR – 2310 – KE)

The project was an investment in the rehabilitation upgrading and equipping of 14 clinics as prioritized in the strategic health plan for the Nairobi Area. Implementation began in 1996/97 after the NCC gave assurance that it would effectively run the 14 facilities once they are rehabilitated.

The project was implemented in three strategic zones by three different contractors who won tenders for the respective zones as below.

Zone 1 - Western Zone:

Contractor - M/S Fahari Building Engineering contractors contract sum Kshs. 18,554,275.00

Health facilities - Kangemi Health Centre, Riruta Health Centre, Karen Health Centre, Langata Health Centre.

Status - In this zone most of the work has been completed. Certificate of substantial completion has been issued (on 26/6/98) and 5% of the retention money released.

- All units are complete, handed over and are fully operational.

Zone 2. - Central Zone:

Contractor - M/S Reef Building systems
Contract sum - Ksh. 18,429,081.00
Health Facilities - Ngara Health Centre. Eastleigh Health Centre, Bahati Health Centre, Jericho Health Centre, Ngaira Health Centre.

Status - This zone progressed rather slowly. Many Health Centres are about 90% done and work is still on-going. Also there have been several variations and omissions of initial contract items. The contractor works on & off due to delays in processing his payments.

- Ngara Health Centre is 90% complete and functional. Minor plumbing and electrical works are pending in the maternity unit.

- Ngaira Dispensary Dental Unit was omitted. Minor-repairs were done to the roof. The facility has been operational all through.

- Bahati Health Centre – Laboratory, car-park and access road were omitted. Maternity Unit has been rehabilitated. Minor defects being dealt with by the contractor. Can be taken over by end of April 2001.

- Eastleigh Health Centre – Maternity unit is about 90% complete. Minor electrical works still pending. Dispensary about 40% done. Work to progress in the Dispensary once the maternity units is handed over.

- Jericho Health Center – both Dental and Laboratory units were omitted. This unit has remained operational all through.

The 10% retention money is still held.

Zone 3 – Eastern Zone:

Contractor - M/S G.G. Gachara construction.

Contract value (revised) - Kshs. 18,366,035.

Health facilities - Kayole Health Centre, Lunga Lunga dispensary, Mathare North Health Center, Dandora Health Center, Kahawa Health Centre.

Status - Work in this zone was sluggish, and diminished in quality with time. Soon after funds were committed to the contractors in 1998 the contractors deserted the site. Recent attempts to trace the contractors have been fruitless and a termination letter was written on 28/12/99 procedures for recovery of the bond to be followed. Inventory of pending works already done by the Architectural Department.

Dandora Health Center – 90% complete. Louvre windows, some electrical works and installation of water tank still pending. Some material is on site. This can be made operational if the minor works are done.

Kahawa West - Minor electrical works in maternity unit, louvre

windows and water tank still pending. Only the maternity unit is not operational since it is yet to be connected to the main server line. Wall only 10% done.

Kayole II H/C - Electrical works & plumbing for laboratory 80% complete. Not operational. Can be operational if electricity is installed.

Lunga Lunga - Doors and window frames fitted but were condemned Perimeter wall 80% done. Floors 70% done. The incomplete works have proved a security risk with several breakages into the dispensary. Only the MCH clinic is fully operational.

Mathare North - Dental and Lab building 50% complete, boundary wall excavations done. Floor, doors and windows only 40% done. Destruction of the old fence by excavation now exposes the health centre to vandalism. Water tank has not been installed. Mathare North is operational, though the dispensary floor is incomplete and the incomplete works in the maternity unit leave clients exposed to the weather elements.

In this project, equipment was also purchased for the Health Centres and stored at Pumwani Maternity Hospital. Some equipment e.g. 1 Dental Unit was given to the PMO (Mbagathi Hospital). Apart from this 1 Dental Unit, the rest of equipment is at Pumwani Maternity Hospital and a list is available. A scheduled external auditing by a team from Afya House last year was not done.

The department is yet to confirm the items purchased under the credit with the supplies agents GTZ and the list may be revised for the facilities that are operational or functional, pre-installation works for e.g. Laundry equipment and dental equipment yet to be done.

The records relating to this project are available in two files, but the filing is wanting, as there is incomplete folio numbering. It is therefore difficult to evaluate the completeness of the project records. Indications are that some documents may have been misfiled, or were not submitted to the Medical Officer of Health at all. The general picture of the project as reported here had emerged from discussions with the project supervising architects and engineers from the City Planning and Architectural Department.