

1. INTRODUCTION

The University of Nairobi is the premier university in Kenya set up in 1970. Overtime, the University has grown not only in student admission, but also in the number of courses, processes, products and activities it is undertaking, with over 50,000 students and a staff compliment of over 5,000.

The University's Vision is "***A world-class university committed to scholarly excellence,***" while its Mission is "***To provide quality education and training and to embody the aspirations of the Kenyan people and the global community through creation, preservation, integration, transmission and utilization of knowledge.***"

The Core Values are: ***freedom of thought and expression; innovativeness and creativity; good corporate governance; team spirit and teamwork; professionalism; quality customer care; responsible corporate citizenship and strong social responsibility, and; respect for and conservation of the environment.*** In 2008, the University attained ISO 9001:2000 certification being a clear position of intent towards its stated vision and mission.

In 1985, The University of Nairobi through an Act of Parliament established six colleges, namely:

- i. The College of Agriculture & Veterinary Sciences (CAVS)
- ii. The College of Architecture and Engineering (CAE)
- iii. The College of Biological and Physical Sciences (CBPS)
- iv. The College of Education and External Studies (CEES)
- v. The College of Health Sciences (CHS)
- vi. The College of Humanities and Social Sciences (CHSS)

These colleges operate from various campuses:

- 1) **Main campus** – this is situated near the City Centre and bounded roughly by Harry Thuku Road on the East, University Way and Nyerere Road to the South, Mamlaka Road to the West and Msonga Wai/Nairobi Rivers to the North. Located here are CAE, a large part of CHSS, Central Administration, Jomo

Kenyatta Memorial Library, the Bookshop, School of Journalism, Institute of Development Studies, Institute of Diplomacy and International Studies, Institute of Nuclear Science and Technology, Offices of Common Undergraduate Courses, Board of Post-Graduate Studies, Office of Special Student Advisor, and the majority of Students Halls of Residence and the Central Catering Unit. Construction & Maintenance Department, Transport and Garage Department, Central Stores, and Estates Department are also located at Main Campus.

- 2) **Chiromo Campus** – located some two kilometers from Main Campus off Riverside Drive and across Msonga Wai River. This campus is home to CBPS within which fall the School of Biological Sciences, School of Computing and Informatics, School of Mathematics, School of Physical Sciences and Pre-clinical Medical and Veterinary Department. Chiromo Funeral Home, Halls of Residence and Science Workshop are also located here.
- 3) **Upper Kabete Campus** – located some thirteen kilometers from Main Campus, it's situated close to the North-Western City boundary off Kapenguria Road. This is home to CAVS which accommodates the Clinical Departments of the Faculty of Veterinary Medicine and the Faculty of Agriculture. The Field Station where agricultural experiments are carried in the open fields or green houses are located here. The Veterinary Farm is located four kilometers to the West of the Campus along Fort Smith. The college also has halls of residence, a clinic, several tuck shops and photocopying facilities.
- 4) **Lower Kabete Campus** – located along Lower Kabete Road some ten kilometers from Main Campus, Lower Kabete Campus houses the School of Business. Besides the halls of residence, the campus has the SWA catering services, clinic, privately-run eateries, photocopying services, internet cafes and tuck shops.
- 5) **Kikuyu Campus** – Houses College of Education and External Studies, located approximately twenty four kilometers from Main Campus. The college operates several regional and sub-regional training centers throughout the country. There are several halls of residence, a clinic, a printing press, tuck shops and privately-run eateries.

- 6) **Kenyatta National Hospital Campus** – located about five kilometers from Main Campus within Kenyatta National Hospital where the College of Health Sciences is housed. School of Nursing Sciences, Center for HIV Prevention and Research, Institute of Tropical and Infectious Diseases (UNITID), School of Medicine, School of Pharmacy and School of Dental Sciences are in this campus. It has several halls of residence, laboratories, catering services and tuck shops.
- 7) **Parklands Campus** – Located along Forest Road, approximately three kilometers from Main Campus and is home to the School of Law. There are tuck shops, catering services and photocopying facilities apart from residential houses.
- 8) **Kenya Science Campus** – Located about eight kilometers from Main Campus and houses Bachelor of Education (Science) programmes. There are residential houses in this campus, halls of residence, laboratories, catering services and a number of tuck shops.
- 9) **Mombasa Campus** – where part of CHSS operates, it is located at Uni-Plaza Building along Moi Avenue; Jubilee Building and Bandari College.
- 10) **Kisumu Campus** – where part of CHSS & CEES operate. It is located in Mega City, British Council Building and Kisumu Plaza.
- 11) There are also field stations (research stations, also known as our stations) in various parts of the country as well as Extra Mural Centres. The field stations are: Kibwezi Dryland Station; Malindi Farm (underdeveloped); Moana Marine Research Station; Nyeri Extra Mural Centre Plot (undeveloped); Kakamega Extra Mural Centre Plot (undeveloped); Tigoni Guest House; Machaga Field Station. The Extra Mural Centres are: Mombasa; Meru; Nyeri; Garissa; Nakuru; Thika; Bungoma; Busia; Kisii; Kapenguria.

University of Nairobi owns and operates an extensive portfolio of physical assets that include land, buildings, plant and equipment as well as motor vehicles utilized in conjunction with human resource to facilitate the realization of the vision and mission through teaching, research and corporate social responsibility.

In addition, the University owns 630 rental units located in various places within the campuses and elsewhere. The University also owns a fleet of 207 motor vehicles currently in different states of maintenance.

As at June 30th 2010, the total value of University assets was **Ksh 39.674 billion**, of which 61.4%(Ksh 24.388 billion) represented land values and the balance of 38.6 %(Ksh 15.286 billion) represented buildings, plant, machinery, equipment and motor vehicles.

In order for the University to achieve its stated vision and mission, and the core values, it requires physical facilities in addition to human resources. These facilities need to be retained or maintained in a state that enables the University to execute its mandate for research, teaching, creativity, and professionalism. This document provides a management framework to ensure that the extensive portfolios of building assets that the University owns and operates are maintained effectively to support the University's strategic objectives. The document also presents a consistent approach to the maintenance of assets while maximizing their useful life and provision of best service, and defines the roles and responsibilities of stakeholders in the maintenance and preservation of physical assets.

2. MAINTENANCE POLICY

2.1. Need for a Maintenance Policy

The purpose of a Maintenance Policy is to outline the values and standards for maintenance, funding needs for maintenance, as well as the roles and responsibilities of stakeholders in the maintenance and preservation of University of Nairobi physical assets.

The objectives of a Maintenance Policy are therefore to:

- 1) Ensure that assets are adequately maintained.
- 2) Ensure that associated risks are effectively managed.
- 3) Ensure statutory compliance (Public Health Act, Environmental Management and Coordination Act, Occupational Safety and Health Act, etc).
- 4) Ensure that the physical assets perform effectively and efficiently throughout their service life.
- 5) Specify minimum requirements for the management of maintenance.
- 6) Ensure that appropriate decisions are made in selecting maintenance strategies.
- 7) Ensure that a sound basis exists for the allocation of maintenance funds.
- 8) Clarify maintenance responsibilities for the physical assets among stakeholders.

The Maintenance Policy should relate to the University's vision, mission, and core values while operating within statutory requirements and in tandem with other university policies such as the Quality Policy Statement, Environmental Policy, Anti Corruption Policy, etc as appropriate. The policy relates to maintenance of buildings, grounds, plant and equipment with regard to their maintenance standards, health and safety, security and access, and working in occupied premises. It envisions identification and prioritization of maintenance needs, preventive maintenance and planning cycle, routine servicing requirements and cycles, the tasks done in-house and the ones outsourced. Besides, it looks at staffing needs and the structure in which they operate and the resultant management.

2.2 Regulatory Framework Governing Asset Ownership and Maintenance

In order for a Maintenance Policy to adequately meet the needs of University, it not only has to meet the requirements within the setting from which it operates, but also be within the statutory and other regulatory frameworks within which the policy applies.

This draft policy draws from a number of various regulatory frameworks such as:

- a. **The University of Nairobi Act (UoN 1985)** – Especially Management of Assets, administration of property and funds of the University, and the University of Nairobi Statutes, 1991.
- b. **The Public Health Act** – Relating to infected buildings, inspection and disinfection of such buildings, destruction of any building, bedding, clothing or other articles which have been exposed to infection. It requires that buildings should be constructed and maintained in a manner in which they are neither dangerous nor injurious to the health and safety of occupants.
- c. **The Environmental Management and Coordination Act (EMCA)** – Relating to Protection of forest, Conservation of energy and planting of trees or woodlots, Environmental Impact Assessment and audit, Environmental monitoring, Water and pollution prohibition, Discharge of effluents, Air quality standards, Standards for waste, Prohibition against dangerous handling and disposal of wastes, Hazardous wastes, Regulations of toxic and hazardous materials etc., Prohibition of discharge of hazardous substances, Chemicals and materials or oil into the environment and spiller's liability, Offences relating to pesticides and toxic substances, Standards for noise, Environmental restoration, Conventions, Agreements and treaties on environment.
- d. **The Occupational Safety and Health Act (OSHA) 2007** – Relating to Safety and health audits, Prohibition against creation of hazards, General duty of persons in control of certain premises in relation to harmful emissions into atmosphere, Occupational diseases, Research and related activities, Cleanliness, Overcrowding, Ventilation, Lighting, Drainage of floors, Sanitary conveniences, Machinery safety, General provisions on

safety including precautions in places where dangerous fumes are likely, Chemical safety, General provisions on welfare, Special provisions on health, safety and welfare, Special applications (especially on premises in which steam boilers, hoist or lifts are used) and Safety and health regulations.

- e. **The Local Government Act (LGA)** – Relating to Sewerage and drainage; Water supply; Works of the supply of electricity, light, heat and power; Houses; and Trunk roads, which must be carried out and maintained to the required standards for health and safety.
- f. **The Public Procurement and Disposal Act 2005** with respect to General procurement rules, Tendering, Alternative procurement procedures, Compliance, Disposal of stores and Equipment ;and subsidiary legislation on the Public Procurement and Disposal Regulations (2006) and the Public Procurement and Disposal (Public Private Partnerships) Regulations (2009).
- g. **ISO 9001:2008**– The University was certified by International Organization for Standardization (ISO) 9001: 2008 in the year 2008. This is a Quality Management Standard whose key requirements include:
 - i. A set of procedures that cover all key processes in the business;
 - ii. Monitoring processes to ensure they are effective;
 - iii. Keeping adequate records;
 - iv. Checking output for defects, with appropriate and corrective action where necessary;
 - v. Regularly reviewing individual processes and the quality system itself for effectiveness; and
 - vi. Facilitating continual improvement

ISO 9001 registration implies a clearly defined process including that of maintenance which this Maintenance Policy draft addresses.

2.3 Maintenance Policy Committee

The Maintenance Policy Committee was appointed vide the Vice-Chancellor's letter dated March 2, 2010 to formulate a Maintenance Policy for the University of Nairobi.

The members appointed to the Committee were:

1. Prof Paul M. Syagga - School of the Built Environment
(Chair of The Committee)
2. Dr. S. M. Masu - Manager, Construction & Maintenance
3. Mr. T. M. Thuita - Ag. Estates Manager
4. Dr. T. C. Anyamba - Dept. of Architecture and Building Science
5. Prof. D. N. Mungai - Dept of Geography & Environmental Studies
6. Dr. E. Omwenga - Director, ICT (Represented by Mrs. Almaz Yohannes-Mbathi)
7. Mr. J. M. N. Kanyugo - Chief Technologist, Civil & Construction Eng.

The Committee co-opted with approval members from Procurement, Transport & Garage and Electrical & Information Engineering namely:

8. Dr. (Eng.) J. Ogola - Transport & Garage Coordinator
9. Mr. J. M. Mokaya - Procurement Manager
10. Mr. D. Munyasi - (Represented by J. Aduol) Dept. of Mechanical Engineering
11. Mr. B. Chomba - Electrical & Information Engineering
12. Ms. Elizabeth Gachithi - Finance Department

The Construction & Maintenance Department provided the secretariat staff namely:

13. Mr. F. W. Kachero - Secretary
14. Ms. J. W. Ng'ang'a - Typing services

The Committee also utilized the services of eighteen (18) Research Assistants from various disciplines to carryout physical assets and interviews and the services of two other persons mainly for the purposes of analyzing data collected from the interviews and physical inspections of the assets namely:

- 15. Hudson Lusisa - (Dept. of Civil & Construction Engineering)
- 16. Z. O. Kebaso - (Dept. of Mechanical Engineering)

2.4 Terms of Reference (TOR)

The Mandate of the Committee was to formulate a University Maintenance Policy (Annexe 2). In order to address this broad mandate, the Committee further refined these Terms of Reference to include the following:

- Physical facilities: Grounds (including parking lots, farms, civil works, etc.)
- Plant and equipment, (including laboratory and farm equipment)
- Buildings(which include houses, offices and classrooms)
- Transport and garage
- ICT network and infrastructure (including software).
- Information and knowledge resources (which include library facilities).
- Environmental management in relation to maintenance work - Waste Management, Noise, and harzadous waste.

2.5 Methodology

In order to collect the required data for the development of a maintenance policy, the following methodology was adopted:

- a. Literature review of existing information and documents from the University as well as documents from external sources were assembled and studied in order to determine current status of maintenance to establish benchmarks/good practices against which to interrogate maintenance practices at the University of Nairobi.
- b. Developed Instruments used in data collection such as questionnaires and interview guides for the following purposes:
 - 1. Physical audit of existing assets so as to determine;
 - (i) Asset condition assessment (gap between the expected and actual).
 - (ii) Consequential impact/risk rating (consequences of postponement).

(iii) Asset maintenance priority rating (what informs prioritization of actions).

Inspections of the physical facilities were carried out in the major operational areas of all colleges and campuses within and outside Nairobi. However, for a few sites, due to distance and similarity of issues, information was collected from key stakeholders. The following criteria were used in assessing and classifying the conditions of buildings and grounds.

1) As New = the fabric, element or building is either new or has recently been renovated; does not exhibit any signs of deterioration.

2) Minor repairs = The fabric element or building exhibits superficial wear and tear, minor defects, minor or signs of deterioration to surface finishes and requires maintenance/servicing. It can be reinstated with routine schedule or unscheduled.

3) Serious repairs = Significant sections or elements require repair, usually by specialist. The fabric, element or building has been subjected to abnormal use or abuse, and its poor state of repairs is beginning to affect surrounding elements. Backlog maintenance work exists.

4) Critical repairs = substantial sections or elements have deteriorated badly, suffered structural damage and require critical repairs, upgrading or replacement. There is a serious risk of imminent failure. The state of repair has a substantial impact on surrounding elements or creates a potential health or safety risk.

5) Condemn or replacement = the fabric, element or building has failed, is not operational or deteriorated to the extent that does not justify repairs, but should rather be condemned or replaced. The condition of the element actively contributes to degradation of surrounding elements, or creates a safety, health or life risk.

For plant and equipment the following criteria (**Table 1**) were used for assessment of their conditions.

Table 1: Asset Condition Classification

	Asset Condition Category	Expected Standard
1	Best	Asset to be in best possible condition; only minimal deterioration will be tolerated.
2	Good	Asset to be in good operational and aesthetical condition, benchmark against industry standards for that particular class of asset. Thus legislative or statutory maintenance must be upheld to ensure the University complies with current legislative requirements and standards. Experimental, diagnostic and ICT equipments fall in this category in terms of international calibration standards
3	Reasonable	Asset to be kept in reasonable condition fully meeting operational requirements.
4	Minimum	Condition needs to meet minimum operational requirements only, notably stores, garages, car parks. The physical conditions should not be allowed to fall into class “4”(critical repairs) .
5	Holding	This is the condition of a condemned building not to be put to any use but must be marginally maintained for purposes of safety pending demolition.

2. Interviews/discussions with stakeholders so as to;

- i. Determine maintenance aspirations/expectations.
- ii. Determine maintenance responsibilities.
- iii. Determine maintenance funding levels.
- iv. Determine maintenance strategies.

Several interviews/discussion sessions were held with stakeholders from all colleges who included Principals, Deans, Directors, Chairmen of departments, other members of staff, students’ representatives as well as tenants’ representatives of University houses.

C. Preparation of the report

This included data analysis using SPSS programme based on physical inspection audits and interviews with various stakeholders. The report includes;

- i. Analysis of current status of university assets

- ii. Analysis of issues and recommendations
- iii. Maintenance policy recommendations

3. KEY FINDINGS

3.1. Grounds and Buildings

The overall assessment rating for grounds and buildings was carried out in all colleges. The following are key findings emanating from analysis of the questionnaires and participatory discussions with concerned stake holders.

Of the sites audited, 47% (23) reported that they had diagrams of site and/or premises layout. Slightly more than a half of University sites do not have the site/premises layouts which are essential for site/premise maintenance work and during emergency operations.

About 43% (21) of the sites investigated had drainage layout plans. More than a half of University sites do not have the drainage layout plans which are essential for site/premise maintenance work and during emergency operations.

3.1.1 Standard of Maintenance Services

Maintenance services are not consistent across colleges. It was observed that some colleges are better maintained than others. In some cases staff offices were found to be in very poor state. There are also frequent power outages especially at ADD, CHS and SWA halls of residence and offices, perhaps due to overloading of the transformer and installation equipment.

3.1.2 Maintenance of Academic Buildings and Offices

There are a number of buildings which are quite old/dilapidated such as the damaged HABRI building (ADD) which has remained so for three years after a tree fell on it, and the School of Pharmacy which has huge gaping cracks that loom disaster any time. Such structures should be bonded as they pose danger to users. Other buildings are falling into disuse due to lack of routine and programmed maintenance with incessant roof leaks, plumbing and drainage problems, damaged floors, and dirty paint work. Sun breakers (sun shading) on certain buildings such as ADD building are falling down. In

most buildings the electrical installations and plumbing systems are a source of concern and cause of interruption in delivery of research and teaching. In some buildings, toilets were designed for one gender (Engineering Block), while the overall utility facilities were intended for a population attending the University in 1956 which is less than a tenth of the current population. Facilities are therefore overused with resultant frequent breakdowns.

In many instances painting and other maintenance works are applied externally to buildings leaving the interior still untidy. And more importantly, outlawed building materials such as asbestos, which is not recommended due to its medical consequences, is still on many University buildings not only as roof coverings but as internal ceilings.

3.1.3. Teaching and Office Space

The office and learning spaces are inadequate in most colleges. For instance College of Health Sciences in particular has very limited space which has made it difficult for the college to provide adequate recreational facilities for students and staff.

There are also great inter-college, inter-faculties and inter-departmental disparities in the provision of furniture in certain offices and lecture halls.

Lack of space at Kikuyu Campus has compromised the admission of external students who normally are accommodated during school holidays. It was reported that these students are accommodated in high schools and mid-level colleges; which makes them feel like they are not part of the University of Nairobi students.

3.1.4 Space in SWA & Halls of Residence

- The halls were designed many years with fixed capacities and no longer meet the current needs which have since increased. For example toilets and bathrooms are insufficient for current populations. All spaces that were meant for other activities

such as reading rooms are being converted into sleeping rooms. This further stretches the utility facilities such as washrooms.

- Students cook in the rooms, others have opened laundry and photocopying services and this has not only raised the power bills, but also damaged sockets in the rooms, burnt chairs, blocked drainage pipes and related maintenance issues.
- There is a lot of theft of items such as flush valves etc.

3.1.5 Maintenance of Residential Houses

There is no planned programme for maintenance of houses occupied by staff as tenants of the University. Most of the access roads to the estates are in poor state.

A number of houses have leaking or falling roofs and water leakages from broken pipes, abandoned septic tanks, open drainages and unrepaired sewer pipes. In a few cases, sewage collects in a pit in the estate and is never drained. In some instances tenants have to use toilets to wash utensils because kitchen sinks do not work. In some cases, water storage tanks are needed; in others, after erecting the storage tanks, water does not flow in – rendering the whole exercise worthless. These pose great and serious dangers to health and safety.

Most residential houses are in a state in which they are exposed to insecurity. Remedial actions that have been identified (such as perimeter fencing, street lights) are never implemented or take forever to be. In other cases, a perimeter wall has been constructed but a section left, and this stays so. Painting is rarely done to the University houses, some dating to 1970s. Tree hazard assessment is rarely done; old trees in some of the estates are hanging menacingly and can easily fall.

Tenants are given only seven days in which to move into an allocated house irrespective of the state of the house. The M1 forms process takes very long to ultimately get required maintenance/repair in a house. Tenants then use their money to repair the houses which is never refunded. It was reported in one case for instance where a tenant used more than KShs. 200,000 to repair a house on being allocated,

and to-date this has not been refunded. Similarly, asbestos is still on so many University houses both as roof covering and ceiling despite its known health hazards.

The staff charged with maintenance of houses are quite few and overstretched. Lack of staff implies that the supervision of the casuals is also not adequate. For instance, when the casuals engaged go to site, they sit idle counting days. Allowing casuals to take over the work in houses is not safe.

The management of MI (maintenance request forms) is disappointing. M1s are filled, sometimes many times for the same activity and take long before they are acted on, if any. This is poor customer relations since the user is never advised about the state of M1 by the maintenance staff.

3.1.6. Overall Building Assessment Rating

The observations made above are complimented by the overall building assessment rating of the physical condition for selected buildings in various colleges and residential houses in various locations (**Tables 6.1.1 to 6.1.9 in Annexe 6.1**). A number of buildings require repairs of one form or another as no building can be described as new or maintenance free. Many buildings require minor repairs to the roofs, doors or floors or a coat of paint. A few buildings such as Hyslop Building, Education Building, Kileleshwa Flats or uncompleted buildings at the School of Business require serious attention to carry out various construction works such as repairs to the roof, drainage of basement water or completion of stalled works. In isolated instances such as the School of Pharmacy the building can only be classified as “holding” pending demolition as they are structurally unsafe for occupation.

3.2. Plant and Equipment Condition Assessment

Tables 6.2.1 to 6.2.7 in Annexe 6.2 provide the condition assessment for various plant and equipment found in various college campuses. Equipments in many schools/faculties are old, expensive to maintain and difficult to repair and spares are no longer available in the market. It was reported for instance that laboratory equipment in

engineering workshops, science laboratories and medical departments were purchased between 1960s and 1980s. In many cases, there are no technicians to service the equipment, while some of the equipments are obsolete but continue to occupy space in the laboratories.

In some colleges some of the equipments are procured through donor funded projects. When the projects end, the equipment remain for use in the respective colleges/schools/institutes without appropriate funding for routine maintenance, repairs and replacement as well as requisite personnel to service them.

Fire equipment needs attention as well. It was for instance reported that there were several cases of theft of fire fighting equipment. Regular inspection and servicing of fire fighting equipment is necessary in all university facilities.

At Kikuyu Campus, the printing press is an important component of the college. However, the existing ventilation is inadequate which leaves the workers exposed to hazardous fumes from the printing machines. Despite its centrality to the college, its work is frequently frustrated by the Central Stores and Procurement that delay maintenance.

3.3. Electrical Installations

In most of areas visited there were no electrical installation diagrams which were available to ease inspection. For instance, only about 35% of the audited sites had diagrams of ventilation ducting layout. Over 60% did not have. These diagrams are essential for maintenance operations as well as during emergency situations.

In the labs visited in all the colleges, some equipment were found obsolete, their spare parts are not available and therefore cannot be serviced or calibrated. Even for those in use, it was reported that procuring spare parts takes long thus hindering the repair of the equipment and electrical fittings.

Table 2: Selected Electrical Installations

Location	Building	Condition	Remedial Measure
Central Administration	Administration Block	Some sections are aged. Incoming room switch gears are old. There are no visible or lit signs to show exit, no smoke detectors.	Wiring needs inspection and updating of wiring system as appropriate.
UNES	Offices	The wiring is old and is practically surface which is dangerous.	Rewiring necessary for the entire building
UHS		No major electrical problems, except, acquiring right service man with the knowledge of the equipment to be serviced appears difficult.	Need for regular maintenance
SWA	Kitchens	Electrical appliances used in cooking, lighting and other useful services fail frequently.	Need for regular maintenance
	Halls	Frequent electrical failures in rooms with possible dangers of electrocution or fire	Reduce overloading by restricting use of unauthorized and inappropriate appliances
CAVS	Labs and lecture theatres	A number of the electrical equipments including fridges, deep freezer, water bath incubators, scales, ovens shakers, etc are either out dated or needs disposal urgently to create space	Urgent action on calibration and procurement of maintenance spare parts.
CEES		Reasonable	Needs regular and proper maintenance.
Dental School		Reasonable	Disposal of obsolete equipment and the need for service contracts of the new machines.
Medical School	Halls and Kitchen	Poor connections and inappropriate wire rating.	Both kitchens and halls need electrical

			overhaul and rectification of mains distribution board.
	Labs	A number of equipments are out dated and not-serviceable	Dispose and replace
ADD Building		Poor condition <ul style="list-style-type: none"> • The control room faces tapings of the supply from the incoming mains with armored tray cable missing. • Water Leakages go through electrical cables. • The two top new floors are not properly electrically installed. 	Need for complete overhaul of the electrical system in the building.
Kenya Science campus	Halls and Kitchen	Mains switch gears are aged There are sections without adequate power supplies and lighting.	Needs overhaul .
	Staff Quarters	Poor state; Security lights poles, farm project, swimming pool neglected.	Inspection and regular maintenance
Kisumu Campus		Old generator in the British Council Building and expensive to maintain. Non-functional air conditioners.	Inspection of the Buildings, replacement of old generator and air-conditioners with service contract
Lower Kabete	Halls and Kitchen	Standby generator is old and difficult to maintain	Inspection and subsequent rewiring
Mamlaka Staff Houses		The incoming supply to the meter box (mains switch) has one meter for the whole premises,	Urgent need for meter separation for each unit Servant quarters should be checked for re-wiring More security lighting system needed
Moana research Station		Some sections are not lit e.g. toilets, quarters. The care taker house is badly wired with	Inspect and restore the wiring as required and

		hanging cable posing danger. Generator is not adequate to serve the station. Maintenance staff not enough.	then rewire the areas where there is no power.
Mombasa Uniplaza		Power incoming room where the switch gears are and meter are too old.	Need to update wiring
Parklands Campus	Administration Block, Lecture Rooms and Library.	Unauthorized tappings from the supply. Stand by generator is small to supply enough power.	Need to upgrade the standby generator and upgrade the power supply
	SMU, Staff Quarters and Kitchen	Unauthorized tappings of supply is causing a lot of overloads e.g. power to clinic is tapped from swimming pod which is already overloaded and pumps are not working at all lighting e.g. toilets, bathrooms, power points have been vandalized. The students connect their entire gadget in the system overloading it more and more and expecting anything to happen serious e.g. fire, electrocution or burns.	Reduce overloading by restricting use of unauthorized and inappropriate appliances

3.4. ICT Equipment

3.4.1. Types of ICT Equipment

Table 3 below shows the various types of ICT equipment from 58 ICT sites audited in all campuses.

Table 3. Types of ICT equipment

Type of Equipment	Quantity
Computers	<ul style="list-style-type: none"> • 22 sites have the highest number of computers between 11 and 30 • 15 sites have computers between 31 and 100. • 10 sites have computers between 6 and 10 • 9 sites have computers between 1 and 5 with only one sited having above 100 computers
Laptops	<ul style="list-style-type: none"> • 4 sites had the highest number of laptops between 1 and 5 • One site had laptops between 6 and 10 and another site had between 11 and 30

Computer Printers	<ul style="list-style-type: none"> • 31 sites have the highest number of printers between 1 and 5 • 9 sites have printers between 6 and 10 • 6 sites have printers between 11 and 30
LCDs	<ul style="list-style-type: none"> • 22 sites have the highest number of LCDs between 1 and 5 • 2 sites have LCDs between 11 and 30 • One site has LCDs between 6 and 10
UPSs	<ul style="list-style-type: none"> • 16 sites had the highest number of UPSs between 11 and 30 • 7 sites had UPSs between 31 and 100 • 8 sites had UPSs between 1 and 5 • 5 sites had UPSs between 6 and 10
Operating System	<ul style="list-style-type: none"> • 36 sites have XP as their operating system • The rest of the sites had a combination of XP, VISTA and Window7, Windows 2000, XP, and Linux with only one site having Macintosh.
Missing	<ul style="list-style-type: none"> • Quite a number of sites did not have the following equipments, Heavy duty UPSs, Networking Switches, Scanners, Photocopiers, Printing Machines, Servers, Digital cameras and CCTV cameras.

3.4.2. ICT Condition Assessment

The condition assessment of the ICT equipment found in the 58 sites is described in **(Table 6.3.1 in Annexe 6.3)**. Table 4 below, however, provides a summary of the same. Overall, assessment of ICT equipments was generally good at 68.99%. Areas highlighted by users that need immediate attention include:

- i. Only 36.2 % of the sites have quarterly preventive maintenance done and these sites have less frequent failures.
- ii. Only 69% of ICT equipment are on service contracts. There is a strong case therefore to place major ICT equipment on service contracts.
- iii. Only **60.3** % of the staff have adequate training. There is strong need to train other members of staff on software development such as on-line registration of students, HRMIS etc.
- iv. The current anti-virus system does not seem effective particularly with respect to on-line virus attacks.
- v. Internet accessibility in some sites such as Lower Kabete Campus is often down. This needs immediate attention for the benefit of teaching and research.

- vi. It was observed that there are many unserviceable/obsolete ICT equipments in many stations that need policy for replacement and disposal.

Table 4. Overall ICT Condition Assessment and Remedial Action.

Condition	% Result	Remedial Action	% Need
Best	10.3	As New	29.3
Good	58.6	Needs Minor repairs	44.8
Reasonable	17.2	Needs major repairs	17.2
Holding	13.9	Scrap/Replace	8.7
Total	100.0		100.0

3.5. Transport and Garage Management.

Transport is not equitably distributed among colleges. Some colleges have more buses against a smaller population while some with higher populations have none. Learning programmes are often interfered with because of lack of transport which is rarely availed when needed in time. Thus students have been made to believe that to get transport for their activities, students allegedly use force. Programmes that are field-based are frustrated by lack of transport.

Similarly, maintenance staff members have reported lack of transport as an impediment to their operation. The same truck used to ferry material is the one used to ferry them to site. This is illegal and they have on occasions been caught on the wrong side of the law. Besides, the materials are taken first before staff and by the time the truck gets all on site, a lot of time is wasted. During rains, the open truck cannot be used. In such cases, where casuals are used, payment would still be made despite little real labour input into the work. This is wasteful of resources.

In other instances, the Transport Section allocates a vehicle belonging to a unit to a different unit for a journey, and at the end of the trip it is the unit to which the vehicle belongs to that meets the servicing costs (i.e. maintenance of the vehicle remains with the allotted despite the fact that it is used by a different user).

The current centralization of maintenance of vehicles is not only tedious, it is quite expensive. For example a small spare part that could be purchased cheaply is bought at a higher price (about three times more) and the process takes too long. Servicing or getting spares for vehicles takes too long. The centralized issuance of fuel card top up is cumbersome.

Currently there exists no defined motor vehicle replacement policy. Motor vehicles are mainly replaced when they get grounded as a result of lack of funds required for their maintenance and/or accident damage. Hence there are motor vehicles that are over 20 years still operating so long as the user departments have the funds to support their repairs. In this regard, no clear basis for specifying the maintenance cost or age at which to replace a motor vehicle has been quantified.

3.6. Environmental Management

Maintenance operations of University estate and other properties have an important bearing on environmental quality. The University maintenance operations should aim at not only reduction of environmental pollution, but also enhanced savings due to reduced waste production. It is therefore prudent to mainstream environmental considerations in University Maintenance Policy.

The following are the results of the analysis of checklists that were developed and administered at forty eight sites across the university.

i. List of authorities involved in regulating environmental activities at the University

Knowledge of and, maintaining a list of Government bodies responsible for enforcement of environmental laws that have a bearing on University activities is essential. Only 18% (9) of the audited facilities had this knowledge and had a list of the government departments involved.

ii. Copies of relevant laws, regulations, permits and standards

There are a number of environmental laws, regulations and standards that regulate all activities, including maintenance activities at the University of Nairobi. There are also permits e.g. for waste transportation or for effluent discharge into the environment. About 63% (31) did not have copies of the relevant laws, regulations, permits or standards.

iii. Environmental policy statement

One of the objectives of the environmental policy and management checklist was to find out if different University management units have their own policy for guiding environmental objectives. About 33% (16) of the audited facilities claimed that they had an environmental policy statement.

iv. Procedures and schedules for review of site/departmental environmental policy

Although 33% of the audited sites reported that they had an environmental policy, only 18% (9) sites had established procedures and schedules for review of their environmental policy.

v. Records of environmental performance review meetings

Very few (14%) of the audited sites kept records of their environmental performance review meetings. This suggests that little or no assessment of environmental performance regarding maintenance activities is meaningfully carried out in the University.

vi. Procedures to identify environmental aspects¹ of maintenance at the University of Nairobi and determination of actual or potential significant environmental impacts of maintenance activities

The majority of the audited sites (82%) had not established procedures for identifying environmental aspects of maintenance activities at the University as well as determination of potential and actual impacts.

¹ Refers to elements of maintenance/construction activities which may have potentially beneficial or harmful effects on the environment e.g. discharges and emissions, raw materials & energy use, waste generation, noise, dust and visual pollution

vii. Environmental objectives² and targets³ have been established and documented

Determination of what needs to be done to minimize impacts from maintenance/construction activities as well as specific impact reduction targets is important for the University. However, the results showed about 90% (44) of the audited facilities had not established their environmental objectives and targets in spite of the fact that 33% of the facilities had reported having an environmental policy.

viii. Environmental management programme for achieving objectives targets

Of the sites that responded to the question whether they have established an environmental management programme for achieving the set objectives and targets, about 80% (39) responded that they did not have an environmental management programme.

ix. Permit to work system developed

Permit to work within University sites based on appropriate risk assessment is important for safety of both University and non-University employees; 69% (34) of the audited sites did not have a permit to work system. It may be noted that not all facilities may require the development of a permit to work system.

x. Green procurement policy for the Department

The overall procurement policy is presently guided by the procurement and disposal of assets act which calls for environmental considerations during procurement and disposal of assets. About 31% (15) of the audited facilities claimed that they had a green procurement policy at the site/departmental level. Disposal of obsolete/unserviceable assets at the University of Nairobi seems to be a major problem with serious space and environmental consequences.

xi. Guidelines on green products and services for suppliers

Maintenance/construction projects at the University often require the procurement of goods and services. Green products and services are resource

² What needs to be done to minimize impacts from maintenance/construction activities

³ Specific impact reduction targets

saving, less polluting and less wasteful. As stated in the draft University of Nairobi Environmental Policy, the University should develop these guidelines and inform all suppliers of goods and services.

About 67% (33) of the audited facilities had not established guidelines for green products and services for suppliers.

xii. Waste management

A higher number of the audited sites (55%) had established procedures for waste categorization and handling. However, very few (about 6%) sites were using Cleaner Production methods such as the 3R's (Reduce, Re-use & Recycle).

xiii. Staff training in environmental matters

Only 22% (11) of the audited sites reported staff training on environmental matters. If the University has to meet its environmental objectives and targets overall, and in maintenance/construction activities, the aspect of training will need urgent attention.

From the findings of the audit, it is clear that environmental consideration in maintenance/construction activities at the University of Nairobi is appreciably less than it should be given the University's goal of becoming a world-class University. It will be prudent therefore to mainstream environmental considerations as a key pillar in the Maintenance Policy.

3.7. Procurement Management

The University follows the Public Procurement and Disposal Act, 2005 and the University of Nairobi Financial Regulations to ensure that all goods and services required in the University conform to government regulations. This procedure assumes well planned set of activities including planned preventive maintenance for all the physical assets.

It was observed that the current procurement procedures:

- i. Use of open tender, restricted tender, quotation and direct procurement may not be suitable for certain maintenance activities that are sudden or that are available

only from one supplier. (e.g. Failure of refrigeration in the mortuary, failure of critical ICT equipment such as back-up generator, UPS, Air Conditioners, network switches among others), due to the perceived lengthy and cumbersome procedures.

- ii. Make the cost of materials more expensive than direct purchases particularly for the low cost items.
- iii. Seem to emphasize functionality of goods and services at the expense of quality.
- iv. Assume universal knowledge of products specifications and quality control which is often lacking due to availability of requisite personnel.

It was also observed that:

- i. Most user units are reactive rather than proactive with respect to the procurement process.
- ii. Although some procurement procedures in the university have been decentralized, problems still persist especially with regard to outstations which must still seek approval from the respective colleges or Central Administration such as Regional Campus sites and research stations.
- iii. The University is facing a serious problem of disposal with respect to obsolete and unserviceable plant and equipment as well as past examination scripts that continue to occupy space as well as posing environmental hazards.
- iv. There is no guiding principle on disposal of hazardous chemicals and radioactive waste; nor is there any policy to guide when a tree is to be cut.

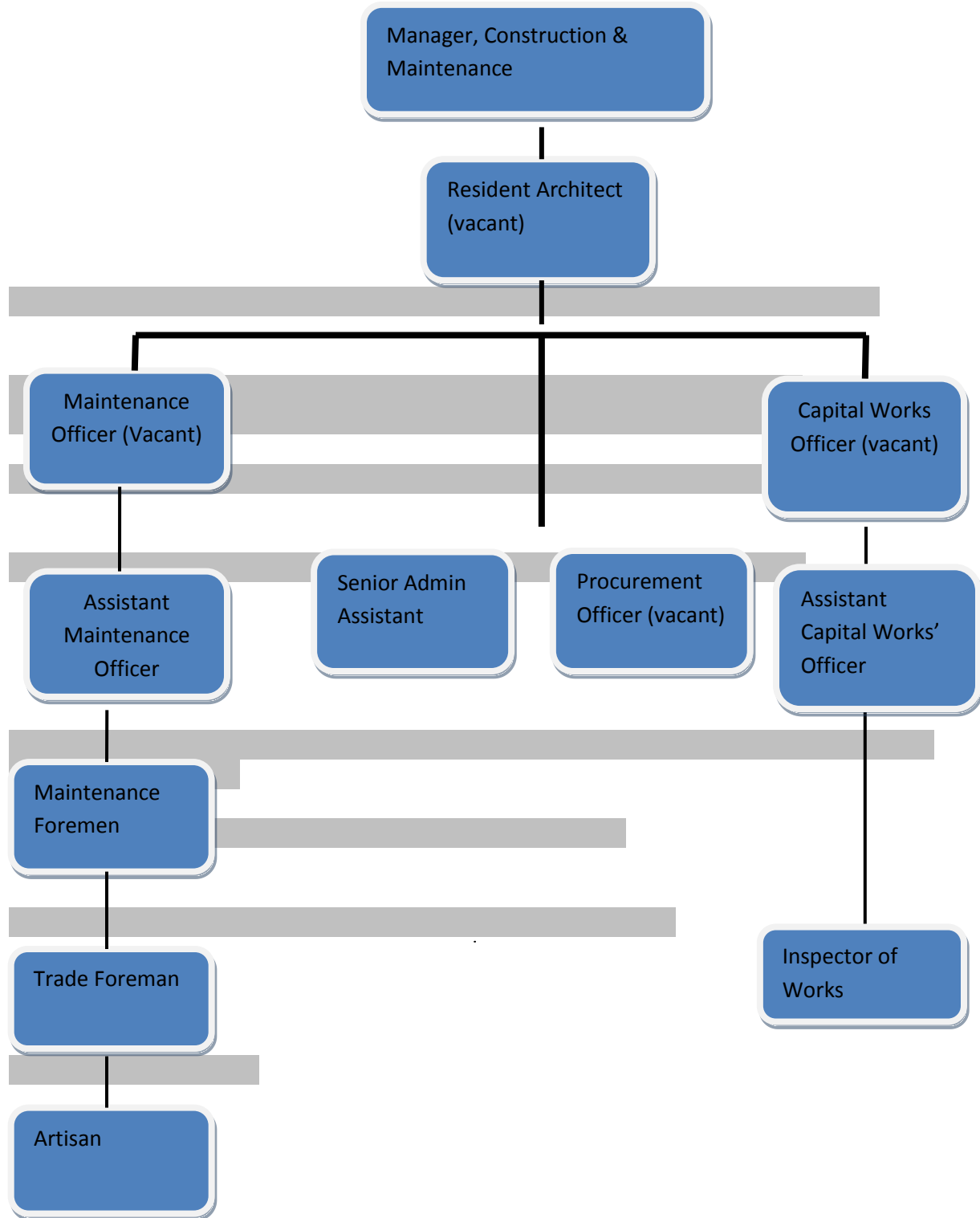
3.8. Current Maintenance Management Practices

Construction & Maintenance Department was previously known as Clerk of Works Division undertaking only development works. Physical facilities were under Estates Department. Following the proposal for restructuring and subsequent approval by the University Management Board (UMB), Construction & Maintenance Department surfaced charged with the responsibility of maintaining existing physical facilities and developing new ones.

3.8.1. Structure

Construction & Maintenance Department is charged with the responsibility of developing and expanding physical facilities for the University, and maintaining the facilities through routine maintenance work. This is geared towards enabling the University execute its mandate. In order to achieve this, the Department is structured in two main sections, namely, Capital Works Section and Maintenance Section as shown in the chart below (Figure 1).

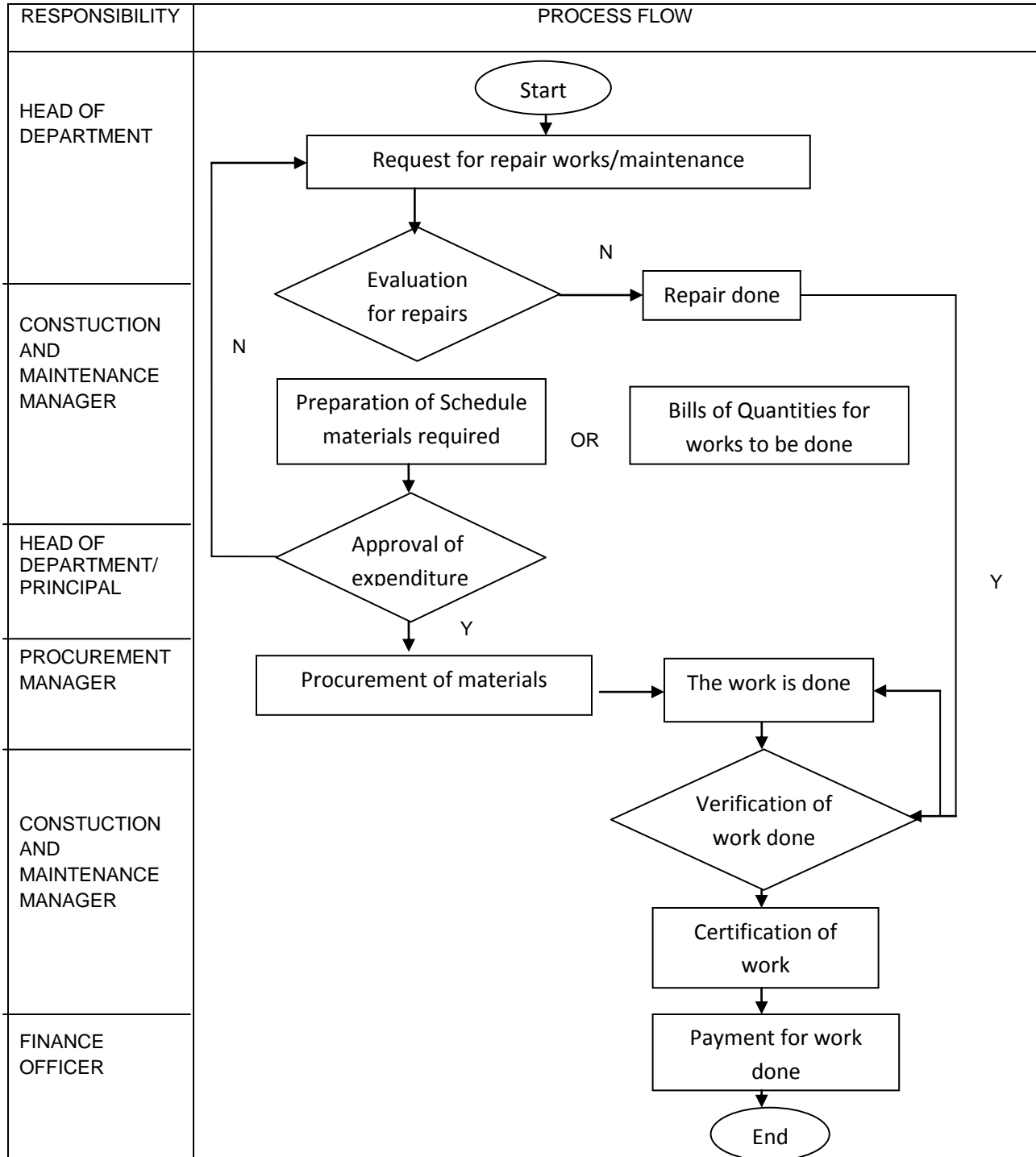
Figure 1: Organizational Chart for Construction & Maintenance Department



3.8.2. Maintenance Section

The process of maintaining the physical facilities is undertaken by the Maintenance Section using the following processes (Figure 2):

Figure 2: The Process Map for Maintenance & Repairs of Physical Facilities



- a. Through formal request by the user department/institute/school/college by filling a Maintenance Instruction (commonly referred to as M1).
- b. Through recognition by the section for a need for repairs; or
- c. An emergency to which the section is alerted to or notices in course of duty such as pipe breakages or power outage. In this case, artisans would fix the problem immediately except where new materials would be required.
- d. In other cases, as a performance contract requirement.

In the first two cases, the process would normally follow the following sequence:

- i. **Take Specifications:** On receiving a request for repairs or on recognizing that there is need for repairs or maintenance works, the technical staff are sent to site and would take specifications of the required material to carry out the works.
- ii. **Seek Procurement:** Identified materials are submitted to Procurement Section which subjects them to its process in order to have them supplied to the Department. Once the materials are received by the Department, maintenance section moves to the next stage.
- iii. **Repair Process:** The process of repair starts as soon as the materials are received. Trained personnel in the respective area are sent on site and do all the repairs to completion. They normally clear the area of any debris and make good any damage occasioned during the process after completing the work.
- iv. **Handing Over:** Having completed the work, the user certifies that he/she is satisfied (if not, further work to the satisfaction of the user continues) and the project is handed to them.

It was observed that;

- i. A number of senior positions such as Resident Architect, Senior Maintenance Officer and Maintenance Officer are currently vacant which may hamper effective performance of the maintenance operations.

- ii. A number of staff are de-motivated as a result of stagnating in the same grades without promotion for a number of years which may negatively be impacting on their performance while at the same time the existing structure does not attract better qualified people from the industry.
- iii. The development/capital vote is always underprovided for vis-à-vis the requirements of the whole University. Delays in paying contractors are frequently experienced, which sometimes lead to litigation. Inadequate funding is more costly to the University than may be perceived due to unaccountable costs in delayed commencement of programmes and projects.
- iv. There are delays in procuring materials caused by long and cumbersome procurement processes.
- v. The department lacks computerized maintenance management information system to facilitate timely management of maintenance activities.
- vi. The department lacks adequate working tools for artisans, transport to ferry staff to workstations as well as lack of working space for staff and tools.

3.9. SWA Maintenance

SWA Department is charged with the responsibility of maintenance of all the Catering and Accommodation facilities within the entire Students Welfare Authority. In terms of maintenance, the section is currently headed by Assistant Maintenance Officer who is administratively under the Director, SWA and technically under the **Manager, Construction and Maintenance** through the Maintenance officer UoN.

It was observed that;

- i. Maintenance services at SWA are required by very unique customers (students) and a lot of care is necessary on account of possible misuse and abuse of the facilities.
- ii. That current SWA maintenance procedure are similar to those undertaken by the Maintenance Section and face similar problems of staffing, inadequate working tools, low budget allocation and bureaucratic procurement procedures.

- iii. That cooking by students in their rooms is a major cause of electrical overloading and other maintenance problems.

3.10 Security

Most of the facilities such as halls of residence, lecture halls, computer laboratories and offices have no adequate surveillance system to monitor movement in and out of the buildings, which compromises security. Vandalism and theft cause maintenance problems. Owing to security issues, there has been a trade-off in image and risk to human life because of excessive burglar proofing and blocking of fire escape routes.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

The following challenges were brought out during the process of discussions with various stakeholders as well as observations drawn from the audit of the physical assets of the University of Nairobi.

4.1.1 Standard of Maintenance Services

- i. Maintenance services are not consistent across colleges.
- ii. There are also frequent power outages especially at ADD, CHS and SWA halls of residence and offices perhaps due to overloading of the transformer and installation equipment.
- iii. In a few cases some buildings and structures are both a health hazard and a security risk.

4.1.2 Teaching and Office Space

- i. The office and learning spaces are inadequate in most colleges and administrative departments.
- ii. Furniture is also inadequate in both quality and quantity in most colleges and administrative departments.

4.1.3 SWA Facilities

- i. There is a mismatch between the number of students admitted and facilities available with resultant severe congestion and increase in wear and tear leading to increased maintenance cost.
- ii. There is wide spread breach of University regulations governing students accommodation at the University.
- iii. The amount of money charged for students' accommodation is insufficient to meet requirements.
- iv. There is a significant backlog of maintenance in majority of the halls.
- v. There is widespread vandalism which negatively impacts on the effectiveness of maintenance.

4.1.4 Maintenance of Residential Houses

- i. Most of residential houses are in poor state of maintenance due to lack of maintenance policy.
- ii. Participatory maintenance is weak.
- iii. The capacity of the Department of Construction & Maintenance is low given the dispersed nature of University houses.
- iv. Customer satisfaction survey is lacking.

4.1.5 Plant and Equipment

- i. A number of equipment in the University suffer from functional obsolescence on account of age, lack of spares and technological advancement.
- ii. There is a shortage of skilled personnel to match changing needs for modern equipment maintenance.
- iii. Inspection and servicing of fire equipment in some cases is inadequate.
- iv. Not all equipments in the University are covered by service contracts.

4.1.6 Procurement

- i. The implementation of procurement plans for goods and services to enhance maintenance is weak resulting in underperformance.
- ii. The requirement by procurement procedures based on functionality and cost rather than brands compromises quality, especially for specialized equipment.

4.1.7 Transport

- i. Currently there exists no transport management system with the result that the status of the vehicle at any given time is not captured to facilitate planned preventive maintenance of the motor vehicle.
- ii. Currently the University does not have motor vehicle replacement and disposal policy with the result that there are vehicles over 20 years still operating at great expenses to the University, while another 67 vehicles(32.3%) out of 207 vehicles are poor or unserviceable and occupy space in the parking yards and pose environmental hazards.

4.1.8 Security

The security system in the University is reportedly weak leading to vandalism and theft especially in the halls of residence and ADD building.

4.1.9 Environment, Health and Safety

From the findings, environmental consideration in maintenance/construction activities at the University of Nairobi is appreciably less than it should be given the University's goal of becoming a world-class University.

4.1.10 Maintenance Management Structure

- i. The Department of Construction & Maintenance is understaffed by 43% leading to underperformance.
- ii. A number of members of staff are de-motivated as a result of stagnating in the same grades for a number of years.
- iii. There is inadequate provision of resources including tools, uniform, personal protective equipment, working space and transport.
- iv. Responsibility relationships between the Construction & Maintenance Department and the college campuses are not clearly defined with respect to maintenance.
- v. Responsibility of different operational units using shared facilities is not clearly defined.

4.1.11 Information Communication Technology (ICT)

- i. There are frequent internet interruptions across the University with negative effects on efficiency.
- ii. The current University anti-virus is not effective particularly with respect to online operations.
- iii. The level of training in the use of ICT equipments and related infrastructure is low resulting in underutilization of ICT capacity.

4.2 Recommendations

4.2.1 Standard of Maintenance Services

- i. The University should undertake annual inspection to identify dilapidated and unusable buildings and structures to facilitate their condemnation by the Ministry of Public Works Board of Survey.
- ii. The University should ensure uniform and consistent planned preventive maintenance with associated funding for all the physical assets so as not to jeopardize realization of the University's mandate and image across all the colleges.
- iii. The University should inspect and upgrade power supply systems including provision of standby generators in all colleges particularly where there are sensitive functions and uses in accordance with paragraph 4.2.1 (i)

4.2.2 Teaching and Office Space

- i. The University should as soon as practicable undertake a gap analysis of space to determine space requirements so as to match the increasing students and staff population.
- ii. The University should carry out a survey to determine the effectiveness of leasing space vis-à-vis space acquisition through development as appropriate. Leased property should, however, meet University standards and be in conducive environments.
- iii. The University should continuously improve the quality of teaching and office space so as to benchmark and uphold the image of a centre of academic excellence.

4.2.3 SWA Facilities

- i. The University should delink student admission from accommodation to minimize congestion as well as wear and tear.
- ii. Enhance enforcement and compliance with University regulations governing student accommodation.
- iii. Security should be enhanced in SWA facilities including installation of CCTV surveillance cameras and human intelligence.

4.2.4 Maintenance of Residential Houses

- i. The University should maintain the leased houses to acceptable maintenance standards.
- ii. The University should carry out annual customer satisfaction surveys.
- iii. The University should draw out lease agreements with tenants spelling out the obligations of both parties.
- iv. The University should integrate the Maintenance Instruction Forms (MI's) into the maintenance management information system.
- v. Alternatively the University could consider outsourcing the management of University staff houses as appropriate.

4.2.5 Plant and Equipment

- i. The University should develop preventive maintenance system for plant and Equipment in accordance with ISO requirements
- ii. The University should develop an Equipment Replacement Policy
- iii. The University should strengthen the mechanical production unit to facilitate fabrication and retrofitting of spare parts.
- iv. Acquisition of new specialized equipment should come with service contract and/or training of maintenance personnel to service the acquired equipments.
- v. The University should undertake regular inspection and servicing of fire equipment in compliance with national statutory requirements.
- vi. The University should continuously update the asset register

4.2.6 Procurement

- i. The University should customize the Public Procurement and Disposal Act (2006) to increase efficiency in its operations.
- ii. Decentralize procurement to Departmental level, and set a ceiling for items that should go through the procurement process so as to fast track maintenance bottlenecks.

- iii. Procedures should be developed to identify high priority areas and facilitate their needs in line with the required operations and processes in the identified areas.
- iv. The University should increase its efficiency in the disposal of obsolete equipment and machines

4.2.7 Transport

A computer based transport information system should be developed to facilitate the following;

- i. To optimize the number of vehicles in operation so as to reduce annual maintenance and environmental costs
- ii. To facilitate improvement of University transport logistics and efficiency.
- iii. To facilitate tracking of preventive maintenance schedules and replacement of obsolete and unserviceable items.
- iv. Alternatively, the University could consider outsourcing transport services so as to reduce maintenance cost and efficiency of operations as appropriate.

4.2.8 Security

- i. The University should improve control points to regulate and monitor movement in and out of strategic building facilities.
- ii. A suitable electronic system that permits authorized persons to and from various buildings is recommended for the University.
- iii. The use of CCTV monitors is highly recommended in line with 4.2.8(ii). This could start in phases.

4.2.9 Environment, Health and Safety

- i. The University should mainstream environmental considerations as a key pillar of the Maintenance Policy.
- ii. The University should develop an asbestos management policy.
- iii. The University should develop procedures and systems for disposal of hazardous wastes including e-wastes.

- iv. The University should conduct annual tree hazard assessment.
- v. The University should develop “permit to work” guidelines for various locations as appropriate.

4.2.10 Maintenance Management

- i. Both maintenance and capital projects should be planned and funded adequately.
- ii. The Department of Construction & Maintenance should be allowed and facilitated to procure fast moving items in bulk.
- iii. The University should increase staffing and facilitate promotion/upgrading of staff in the Department to improve on the staff morale and performance.
- iv. It is recommended that the Department be provided with adequate transport to facilitate supervision and execution of maintenance works.
- v. Appropriate personal protective equipment and tools should be provided annually to the work force as appropriate.

4.2.11 Information Communication Technology (ICT)

- i. The University should carry out preventive maintenance to all ICT equipment at least twice a year to prevent frequent failures.
- ii. All critical ICT equipment should have service contracts
- iii. The University should ensure that up to date and effective anti-virus systems are installed at all sites.
- iv. The University should develop a clear reporting structure for staff deployed in various colleges

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6. ANNEXES

6.1: Condition Rating for Buildings and Grounds

Table 6.1.1 Main Campus Buildings

Name of Building	Location of Building	Element of Building	Condition Assessment	Overall Building Rating
Civil Engineering Block	Main Campus	Roof	Minor repairs	Minor repairs
		Ceiling	Good	
		Walls	Good	
		Floors	Reasonable	
		Doors & Windows	Reasonable	
Hyslop Building	Main Campus	Roof	Poor	Serious repairs to the roof and Minor repairs elsewhere
		Ceiling	Reasonable	
		Walls	Good	
		Floors	Good	
		Doors & Windows	Reasonable	
8.4.4. Building	Main Campus	Roof	Reasonable	Minor repairs
		Ceiling	Reasonable	
		Walls	Good	
		Floors	Reasonable	
		Doors & Windows	Good	
Education Building	Main Campus	i) Poor condition and possible health hazard ii) The basement of the building is logged in water whose source is not known. iii) The lift is non-functional	Critical repairs Replacement of lift	
ADD Block	Mamlaka Road	Roof	Reasonable	Asbestos to be replaced with environmental friendly material
		Asbestos	Health hazard	
		Walls	Good	
		Floors	Good	
		Doors & Windows	Reasonable	

HABRI Low Cost Building	ADD	Roof	Holding	Critical repairs or replacement
		Ceiling	Holding	
		Walls	Minimum	
		Floors	Minimum	
		Doors & Windows	Reasonable	
C.C.U.	State House	Roof	Reasonable	Critical repairs to the drainage system and Minor repairs to the building
		Ceiling	Reasonable	
		Walls	Reasonable	
		Floors	Good	
		Doors & Windows	Good	
Administration Block	Main Campus	Roof	Best	Minor repairs
		Ceiling	Best	
		Walls	Reasonable	
		Floors	Good	
		Doors & Windows	Good	
		Doors & Windows	Good	
Mamlaka Prefab.B		Ceiling	Reasonable	Fire hazard risk and expensive to maintain. Should be replaced with high-rise blocks
		Walls	Good	
		Floors	Good	
		Doors & Windows	Reasonable	
		Doors & Windows	Reasonable	
Mechanical Eng. Building/ Workshops		Ceiling	Reasonable	Serious repairs to the roof requiring low-pitched IT4 sheets
		Walls	Reasonable	
		Floors	Reasonable	
		Doors & Windows	Good	
		Doors & Windows	Good	
Halls of Residence		Ceiling	Reasonable	Minor repairs
		Walls	Reasonable	
		Floors	Reasonable	
		Doors & Windows	Reasonable	

Table 6.1.2 School of Law: Parklands

Name of Building	Location of Building	Element of Building	Condition Assessment	Overall Building Rating
School of Law Offices, Lecture rooms, hostels, dining and	Parklands	Roof	Reasonable	Minor repairs to lecture theatre
		Ceiling	Reasonable	
		Walls	Reasonable	
		Floors	Reasonable	
		Doors & Windows	Reasonable	

Table 6.1.3 College of Health Sciences: Kenyatta Hospital

Name of Building	Location of Building	Element of Building	Condition Assessment	Overall Building Rating
Dental Plaza	School of Pharmacy	Roof	Reasonable	Minor repairs
		Ceiling	Reasonable	
		Walls	Good	Minor repairs
		Floors	Reasonable	
		Doors & Windows	Reasonable	
Clinical Pharmacology	School of Pharmacy	Roof	Reasonable	Minor repairs
		Ceiling	Reasonable	
		Walls	Good	
		Floors	Good	
		Doors & Windows	Reasonable	
Single storey blocks	School of Pharmacy	Roof	Poor State with walls cracking, leaking roofs and poor sanitary facilities	Condemn/Replacement
		Ceiling		
		Walls		
		Floors		
		Doors & Windows		
Diagnostic Imaging & Radiation Dept.		Roof	Good	Minor repairs
		Ceiling	Good	
		Walls	Reasonable	
		Floors	Good	
		Doors & Windows	Reasonable	
Kenya AIDS Vaccine Initiative		Roof	Good	Minor repairs
		Ceiling	Good	
		Walls	Reasonable	
		Floors	Good	
		Doors & Windows	Good	

Admin Block	CHS	Roof	Reasonable	Minor repairs
		Ceiling	Good	
		Walls	Good	
		Floors	Good	
		Doors & Windows	Good	
KAVI		Roof	Good	Minor repairs
		Ceiling	Good	
		Walls	Reasonable	
		Floors	Reasonable	
		Doors & Windows	Reasonable	
Clinical Pharmacology		Roof	Reasonable	Minor repairs
		Ceiling	Reasonable	
		Walls	Reasonable	
		Floors	Good	
		Doors & Windows	Good	
Dental School		Roof	Reasonable	Minor repairs
		Ceiling	Reasonable	
		Walls	Reasonable	
		Floors	Reasonable	
		Doors & Windows	Reasonable	
Obstetrics and Gynecology Dept.	-	Roof	Reasonable	Minor repairs
		Ceiling	Reasonable	
		Walls	Reasonable	
		Floors	-	
		Doors & Windows	Reasonable	

Table 6.1.4 Lower Kabete Campus Buildings

Admin Block Old Lib & SMU	Lower Kabete	Roof	Minimum	Minor repairs
		Ceiling	Minimum	
		Walls	Reasonable	
		Floors	Good	
		Doors & Windows	Reasonable	
Staff Quarters		Poor and located next to proposed sewer treatment site		Condemned
Stalled projects: Halls of residence etc.		Deteriorating		To be completed for use
Generator House		Poor condition		Condemned/replaced

Table 6.1.5 Mombasa Campus Buildings

Moana Research Station	Mombasa	Roof	Good	Minor repairs
		Ceiling	Good	
		Walls	Reasonable	
		Floors	Reasonable	
		Doors & Windows	-	
Mombasa Uniplaza	Mombasa	Roof	Reasonable	Requires external painting and other minor repairs
		Ceiling	Reasonable	
		Walls	Reasonable	
		Floors	Reasonable	
		Doors & Windows	Reasonable	

Table 6.1.6 Kikuyu Campus Buildings

Old Admin. Block, Halls of residence	Kikuyu Campus	Roof	Reasonable	Minor repairs
		Ceiling	Reasonable	
		Walls	Good	
		Floors	Reasonable	
		Doors & Windows	Good	
Admin Block/Library	Kikuyu Campus Library Hill	Roof	Good	As New
		Ceiling	Good	
		Walls	Good	
		Floors	Reasonable	
		Doors & Windows	Good	
School of Continuing and Distance Education	Kikuyu Campus	Roof	Reasonable	Minor repairs
		Ceiling	Reasonable	
		Walls	Good	
		Floors	Good	
		Doors & Windows	Good	

Table 6.1.7 College of Agriculture and Veterinary Sciences Buildings

Name of Building	Location of Building	Element of Building	Condition Assessment	Overall Building Rating
Admin Block	Upper Kabete Campus	Roof	Reasonable	Minor repairs
		Ceiling	Good	
		Walls	Good	
		Floors	Good	
		Doors & Windows	Good	
LARMAT Building	Upper Kabete Campus	Roof	Minimum	
		Ceiling	Good	
		Walls	Reasonable	
		Floors	Good	
		Doors & Windows	Reasonable	

Table 6.1.8 College of Biological and physical Sciences

Name of Building	Location of Building	Element of Building	Condition Assessment	Overall Building Rating
Principal's Office	Chiromo Campus	Roof	Good	Minor repairs
		Ceiling	Reasonable	
		Walls	Reasonable	
		Floors	Reasonable	
		Doors & Windows	Reasonable	
Dept. of Chemistry Building	Chiromo Campus	Roof	Good	
		Ceiling	Good	
		Walls	Reasonable	
		Floors	Reasonable	
		Doors & Windows	Reasonable	

Table 6.1.9 Residential Buildings

Name of Building	Location of Building	Element of Building	Condition Assessment	Overall Building Rating
Kileleshwa Flats	Kileleshwa	Roof	Holding	Needs Serious Repairs
		Ceiling	Reasonable	
		Walls	Reasonable	
		Floors	Good	
		Doors & Locks	Holding	
Mamlaka Flats	Mamlaka	Roof	Reasonable	Minor Repairs
		Ceiling	Good	
		Walls	Good	
		Floors	Reasonable	
		Doors & Locks		
St. Andrews Flats	State House Road	Roof	Holding	
		Ceiling	Reasonable	
		Walls	Reasonable	
		Floors	Good	
		Doors & Locks	Reasonable	
		Foundation	Rising Damp	

6.2: Condition Rating for Plant and Equipment

Table.6.2.1 College of Agriculture and Veterinary Sciences Equipment Condition

Equipment	Location	Condition	Remedial Action
Air Compressor	CAVS – Soil Labs	Reasonable	Needs minor repairs
Ammonia Distillation	CAVS – Soil Labs	Poor	Replace
Atomic Absorption	CAVS – Soil Labs	Poor	Replace
Balance -2-	CAVS – Land Resource	Poor	Needs serious repair
Balance	CAVS – Land Resource	Reasonable	Needs minor repairs
Bench Centrifuge	CAVS – Vet Pathology	Reasonable	Needs minor repairs
Centrifuge -2-	CAVS – Land Resource	Reasonable	Needs minor repairs
Centrifuge -2-	CVS – Public Health	Reasonable	Needs minor repairs
Centrifuge -3-	CAVS – Land Resource	Poor	Replace
Centrifuge	CVS – Land Resource	Reasonable	Needs minor repairs
Centrifuge	CAVS – PHPT	Poor	Replace
Centrifuge	CAVS – Soil Science	Reasonable	Needs minor repairs
Centrifuge	CAVS – Public Health	Poor	Needs serious repairs
Centrifuge Fridge	CAVS – Land Resource	Reasonable	Needs minor repairs
Cold Room	CAVS – Lab 223	Poor	Needs serious repairs
Cold Room	CAVS – CSD	Reasonable	Needs minor repairs
Compressor – 2-	CAVS – Public Health	Poor	Replace
Compressor	CAVS – Public Health	Reasonable	Needs minor repairs
Debital Shaker	CAVS – Soil Microbiology lab	Reasonable	Needs minor repairs
Distillation Unit - 2-	CAVS - LARMAT	Reasonable	Needs minor repairs
Distillation Unit	CAVS - LARMAT	Poor	Replace
Distillation Unit	CAVS – Soil Science	Poor	Replace
Electronic Balance	CAVS – Soil Microbiology lab	Reasonable	Needs minor repairs
Electronic Scale	CAVS - LARMAT	Reasonable	Needs minor repairs
Extractor Fan	CAVS – PHPT	Poor	Replace
Extractor Fans	CAVS – Public Health	Poor	Replace

Fermentor	CAVS – Soil Microbiology lab	Reasonable	Needs minor repairs
Fibre Dept	CAVS – Soil Chemistry & Fertility lab	Poor	Replace
Fridge	CAVS – Lab 223	As New	Preventive maintenance
Fridge	CAVS – Soil Microbiology lab	Good	Preventive maintenance
Fridges(3No)	CAVS – Plant pathology	Poor	Replace
Fume Chambers & Motors	CAVS – Land Resource	Poor	Replace
Fume Chambers	CAVS - LARMAT	Poor	Needs critical repairs
Furnace	CAVS - LARMAT	Poor	Replace
Incubator	CAVS - LARMAT	Poor	Replace
Incubator	CAVS - PHPT	Poor	Replace
Incubator	CAVS – Soil Microbiology lab	Poor	Replace
Incubators (3No)	Oven (2)	Poor	Critical repairs
Microflow	CAVS – Soil Microbiology lab	Reasonable	Needs minor repairs
Muffle Furnace	CAVS - PHPT	Poor	Replace
Muffle Furnace	CAVS – Food Science	Poor	Critical repairs
Nitrogen Distilling Unit	CAVS – Food Science	Poor	Critical repairs
Operating Table	CAVS - CSD	Good	Needs minor repairs
Oven (2)	CAVS – Land Resource	Poor	Replace
Oven (3)	CAVS – Land Resource	Poor	Replace
Oven	CAVS – Land Resource	Good	Needs minor repairs
Oven (2)	CAVS – Plant Pathology	Poor	Needs critical repairs
Ph Meter	CAVS – Food Science	Poor	Needs critical repairs
Photometer	CAVS – Public Health	Good	Needs calibration
Pressure Pump	CAVS - LARMAT	Poor	Needs critical repairs
Print Enlarger Year of Man 1990	CAVS – Vet Pathology	Good	Needs minor repairs
Pump	CAVS – Land Resource	Good	Needs minor repairs
Pump	CAVS – PHPT	Reasonable	Needs minor repairs
Pump	CAVS – CSD	Good	Needs minor repairs

Scale	CAVS – CSD	Poor	Replace
Shaker Incubator	CAVS – Food Science	Poor	Needs critical repairs
Spectro-Photometer	CAVS – Public Health	Poor	Needs critical repairs
Sterilization Oven	CAVS – Lab 223	Poor	Needs critical repairs
Sterilizer	CAVS – CSD	Poor	Needs critical repairs
Theoride meter	CAVS – Public Health	Good	Needs minor repairs
Ultra Microton	CAVS – Vet Pathology	Good	Needs minor repairs
Vacuum Oven	CAVS – Food Science	Poor	Replace
Vacuum Pump Year of Man 2005	CAVS – Vet Pathology	Good	Needs minor repairs
Air Compressor	CAVS – Soil Labs	Good	Needs minor repairs
Ammonia Distillation	CAVS – Soil Labs	Poor	Replace
Atomic Absorption	CAVS – Soil Labs	Poor	Replace
Balance -2-	CAVS – Land Resource	Poor	Needs critical repairs
Balance	CAVS – Land Resource	Good	Needs minor repairs
Bench Centrifuge	CAVS – Vet Pathology	Poor	Needs critical repairs
Centrifuge -2-	CAVS – Land Resource	Good	Needs minor repairs
Centrifuge -2-	CVS – Public Health	Good	Needs minor repairs
Centrifuge -3-	CAVS – Land Resource	Poor	Replace
Centrifuge	CVS – Land Resource	Good	Needs minor repairs
Centrifuge	CAVS – PHPT	Poor	Needs critical repairs
Centrifuge	CAVS – Soil Science	Good	Needs minor repairs
Centrifuge	CAVS – Public Health	Poor	Needs critical repairs
Centrifuge Fridge	CAVS – Land Resource	Good	Needs minor repairs
Cold Room	CAVS – Lab 223	Poor	Needs critical repairs
Cold Room	CAVS – CSD	Good	Needs minor repairs
Compressor – 2-	CAVS – Public Health	Poor	Replace
Compressor	CAVS – Public Health	Good	Needs minor repairs
Debital Shaker	CAVS – Soil Microbiology lab	Good	Needs minor repairs
Distillation Unit - 2-	CAVS - LARMAT	Good	Needs minor repairs
Distillation Unit	CAVS - LARMAT	Poor	Replace
Distillation Unit	CAVS – Soil Science	Poor	Replace
Electronic Balance	CAVS – Soil Microbiology lab	Good	Needs minor repairs
Electronic Scale	CAVS - LARMAT	Good	Needs minor repairs
Extractor Fan	CAVS – PHPT	Poor	Replace

Extractor Fans	CAVS – Public Health	Poor	Needs critical repairs
Fermentor	CAVS – Soil Microbiology lab	Good	Needs minor repairs
Fibre Dept	CAVS – Soil Chemistry & Fertility lab	Poor	Replace
Fridge	CAVS – Lab 223	As New	Preventive maintenance
Fridge	CAVS – Soil Microbiology lab	Good	Needs minor repairs
Fridges(3No)	CAVS – Plant pathology	Poor	Needs critical repairs
Fume Chambers & Motors	CAVS – Land Resource	Poor	Replace
Fume Chambers(6Nos)	CAVS - LARMAT	Poor	Needs critical repairs
Furnace	CAVS - LARMAT	Poor	Needs critical repairs
Incubator	CAVS - LARMAT	Poor	Needs critical repairs
Incubator	CAVS - PHPT	Poor	Needs critical repairs
Incubator	CAVS – Soil Microbiology lab	Poor	Replace
Incubators (3No)	CAVS – Animal Pathology	Poor	Needs critical repairs
Microflow	CAVS – Soil Microbiology lab	Good	Needs minor repairs
Muffle Furnace	CAVS - PHPT	Poor	Replace
Muffle Furnace	CAVS – Food Science	Poor	Needs critical repairs
Nitrogen Distilling Unit	CAVS – Food Science	Poor	Needs critical repairs
Operating Table	CAVS - CSD	Good	Needs minor repairs
Oven (2)	CAVS – Land Resource	Poor	Needs critical repairs
Oven (3)	CAVS – Land Resource	Poor	Replace
Oven	CAVS – Land Resource	Good	Needs minor repairs
Oven (2)	CAVS – Plant Pathology	Poor	Needs critical repairs
Ph Meter	CAVS – Food Science	Poor	Needs critical repairs
Photometer	CAVS – Public Health	Good	Needs Calibration
Pressure Pump	CAVS - LARMAT	Poor	Needs critical repairs
Print Enlarger Year of Man 1990	CAVS – Vet Pathology	Good	Needs minor repairs
Pump	CAVS – Land Resource	Good	Needs minor repairs
Pump	CAVS – PHPT	Good	Needs minor repairs
Pump	CAVS – CSD	Good	Needs minor repairs

Scale	CAVS – CSD	Very poor	Replace
Shaker Incubator	CAVS – Food Science	Very poor	Replace
Spectro-Photometer	CAVS – Public Health	Working	Needs serious repairs
Sterilization Oven	CAVS – Lab 223	Working	Needs serious repairs
Sterilizer	CAVS – CSD	Working	Needs serious repairs
Theoride meter	CAVS – Public Health	Good	Needs minor repairs
Ultra Microton	CAVS – Vet Pathology	Good	Needs minor repairs
Vacuum Oven	CAVS – Food Science	Very Poor	Replace
Vacuum Pump Year of Man 2005	CAVS – Vet Pathology	Good	Needs minor repairs
Circular Saw	CAVS – Animal Pathology	Very Poor	Replace
Cold Room	CAVS – Animal Pathology	Very Poor	Replace
Egg Incubator	CAVS- Egg Incubator Room	Very Poor	Replace
Oven	CAVS – Animal Pathology	Very Poor	Replace
Water Pump	CAVS- Mandela Rd	Working	Needs serious repairs
Cold Room (2No)	CAVS – Animal Pathology	Good	Needs minor repairs
Crane	CAVS – Animal Pathology	Good	Needs minor repairs
Fridge	CAVS – Animal Pathology	Very Poor	Replace
Packaging Machine	CAVS- Water Plant	As New	Ok
Autoclaver(No3)	CAVS – Animal Pathology	Very Poor	Replace
Centrifuge	CAVS – Instrument Room No 160	Working	Needs serious repairs
Deep freezer(No3)	CAVS – Animal Pathology	Good	Needs minor repairs
Deep freezer	CAVS – Animal Pathology	Working	Needs serious repairs
Electron microscope	CAVS – Animal Pathology	As New	Ok
Fridge(No2)	CAVS – Animal Pathology	Good	Needs minor repairs
Fridge	CAVS – Animal Pathology	Good	Needs minor repairs
Incubators (3No)	CAVS – Animal Pathology	Working	Needs serious repairs

Instron	CAVS – Instrument Room No 160	Working	Needs serious repairs
Micro-projector	CAVS – Animal Pathology	Very Poor	Replace
Photometer(No2)	CAVS – Animal Pathology	Good	Needs minor repairs
Ultra-Centrifuge	CAVS – Instrument Room No 160	Very Poor	Replace
Vacuum Pump	CAVS – Animal Pathology	Good	Needs minor repairs
Centrifuge	CAVS – Animal Pathology	Working	Needs serious repairs
Deep freezer(No2)	CAVS – Animal Pathology	Working	Needs serious repairs
Deep freezer(No4)	CAVS – Animal Pathology	Good	Needs minor repairs
Freezer-Drier)	CAVS – Instrument Room No 160	Working	Needs serious repairs
Fridge(No3)	CAVS – Animal Pathology	Good	Needs minor repairs
Incubators (No2)	CAVS – Animal Pathology	Working	Needs serious repairs
Incubators	CAVS – Animal Pathology	Good	Needs minor repairs
Lift	CAVS – Animal Pathology	Very Poor	Replace
Microscope	CAVS – Animal Pathology	Good	Needs minor repairs
Rotary Microdome	CAVS – Animal Pathology	Good	Needs minor repairs
Vacuum Plant	CAVS – Animal Pathology	Replace	Improve maintenance standards
Water Heater	CAVS – Animal Pathology	Working	Needs serious repairs

Table 6.2.2 College of Health Sciences Equipment Condition

Equipment	Location	Condition	Remedial Action
Air Compressor	CHS – UNITID KACP	As new	Ok
Air Conditioning Unit -2-	CHS – UNITID	Good	Needs minor repairs
Air Conditioning Unit	CHS - KAVI	Good	Needs minor repairs
Air Conditioning Unit	CHS - Immunology	Good	Needs minor repairs
Air Conditioning	CHS - UNITID	Good	Needs minor repairs
Back UP Generator	CHS - KAVI	Good	Needs minor repairs
Back UP Generator	CHS – UNITID KACP	As new	As new
Booster water pump	CHS – UNITID KACP	As new	As new
Centrifuge	CHS – Internal Medicine	Good	Needs minor repairs
Condenser-Compressor unit	CHS – UNITID	Good	Needs minor repairs
Evaporator system	CHS – UNITID	As new	Ok As new
Extractor Fan & Blower -2- Year of Man 2005	CHS – UNITID	Good	Needs minor repairs
Extractor Fan & Blower Year of Man 2005	CHS – UNITID	As new	As new
Freezer -2-	CHS - Immunology	Working	Needs serious repairs
Freezer -2-	CHS - KAVI	As new	As new
Freezer	CHS - KAVI	Good	Needs minor repairs
Freezer	CHS - Immunology	Replace	Improve maintenance standards
Freezer	CHS - Immunology	Working	Needs serious repairs
Fridge -2-	CHS - KAVI	Good	Needs minor repairs
Fridge -3-	CHS - KAVI	Good	Needs minor repairs
Fridge -4-	CHS - KAVI	Good	Needs minor repairs
Fridge	CHS - KAVI	Good	Needs minor repairs

Fridge	CHS – Internal Medicine	Good	Needs minor repairs
Incubator	CHS - Immunology	Replace	Improve maintenance standards
Water pump Year of Man 2005	CHS – School of Nursing	Good	Needs minor repairs
Dental School			
Dental Chair (No1)	CHS- Dental School	Good	Needs minor repairs
Dental Chair (No2) Year of Man 1978	CHS- Dental School	Working	Needs serious repairs
Dental Chair (No3) Year of Man 1978	CHS- Dental School	Good	Needs minor repairs
Dental Chair (No4) Year of Man 1978	CHS- Dental School	Good	Needs minor repairs
Dental Chair (No5) Year of Man 1978	CHS- Dental School	Good	Needs minor repairs
Dental Chair (No6) Year of Man 1978	CHS- Dental School	Good	Needs minor repairs
Dental Chair (No7) Year of Man 1978	CHS- Dental School	Poor	Replace
Dental Chair (No8) Year of Man 1978	CHS- Dental School	Working	Needs serious repairs
Dental Chair (No9) Year of Man 1978	CHS- Dental School	Good	Needs minor repairs
Dental Chair (No10) Year of Man 2006	CHS- Dental School	Poor	Replace
Dental Chair (No11) Year of Man 2006	CHS- Dental School	As New	As new
Dental Chair (No12) Year of Man 2006	CHS- Dental School	As New	As new
Dental Chair (No13) Year of Man 1978	CHS- Dental School	Good	Needs minor repairs
Dental Chair (No14) Year of Man 2006	CHS- Dental School	As New	As New
X-ray Machine Year of Man 1978	CHS- Dental School	Good	Needs minor repairs

Table 6.2.3 College of Architecture and Engineering Equipment Condition

Equipment	Location	Condition	Remedial Action
Balance machine	Engineering Block Civil	Good	Needs minor repairs
Balance machine	Engineering Block Civil	Good	Needs minor repairs
Beam & Transfer machine	Engineering Block Civil	Good	Needs minor repairs
C.B.R machine	Engineering Block Civil	Good	Needs minor repairs
Compacting factor machine Year of Man 1965	Engineering Block Civil	Good	Needs minor repairs
Compression machine -2-	Engineering Block Civil	Good	Needs minor repairs
Compression machine -3-	Engineering Block Civil	Very Poor	Replace
Compression machine -4-	Engineering Block Civil	Very Poor	Replace
Compression machine -5-	Engineering Block Civil	Working	Needs serious repairs
Compression machine	Engineering Block Civil	Working	Needs serious repairs
Constant temperature bath machine Year of Man 1965	Engineering Block Civil	Working	Needs serious repairs
Drying Oven 2 machine Year of Man 1965	Engineering Block Civil	Working	Needs serious repairs
Drying Oven 3 machine	Engineering Block Civil	Replace	Improve maintenance standards
Drying Oven machine Year of Man 1965	Engineering Block Civil	Good	Needs minor repairs
H.P.C Compressor machine	Engineering Block Civil	Good	Needs minor repairs
L.A. Abrasion -2- machine Year of Man 1965	Engineering Block Civil	Good	Needs minor repairs
L.A. Abrasion machine Year of Man 1969	Engineering Block Civil	Working	Needs serious repairs

Mixer machine -2-	Engineering Block Civil	Working	Needs serious repairs
Mixer machine -3- Year of Man 1965	Engineering Block Civil	Good	Needs minor repairs
Mixer machine	Engineering Block Civil	Good	Needs minor repairs
Oven machine	Engineering Block Civil	Very poor	Replace
Roller machine	Engineering Block Civil	Good	Needs minor repairs
Sieve shaker machine Year of Man 1965	Engineering Block Civil	Good	Needs minor repairs
Stone Saw	Engineering Block Civil	Good	Needs minor repairs
Vibrator machine Year of Man 1969	Engineering Block Civil	Good	Needs minor repairs
A/C	Institute of Nuclear Science	Good	Needs minor repairs
A/C	Chuna Server Room	As New	Ok
A/C Fan Motor-ED1	ED BLDG	Poor	Replace
A/C Fan Motor-ED2	ED BLDG	Poor	Replace
A/C Fan Motor- Ground Floor	ED Building	Poor	Replace
Band Saw HD/46/1 Year of Man-1952	Mechanical Engineering Labs	Good	Needs minor repairs
Capstan lathe HD/331/1 Year of Man-1952	Mechanical Engineering Labs	Working	Needs serious repairs
Centre lathe HD/331/12 Year of Man-1954	Mechanical Engineering Labs	Working	Obsolete
Centrifugal fan	Mechanical Engineering Labs	Good	Needs minor repairs
Circular cutter Year of Man-1956	Mechanical Engineering Labs	Good	Needs minor repairs
Creep test Machine	Mechanical Engineering Labs	Good	Needs minor repairs
Cylindrical grinding machine HD/340/1	Mechanical Engineering Labs	Good	Needs minor repairs
Diffuser	Mechanical Engineering Labs	Good	Needs minor repairs

Drilling machine 2 SM3 Year of Man-1955	Mechanical Engineering Labs	Working	Needs serious repairs
Drilling machine 162484/16 Year of Man-1955	Mechanical Engineering Labs	Working	Needs serious repairs
E6 Engine 162484/16	Mechanical Engineering Labs	Working	Needs serious repairs
Elevator	ED Building	Broken down	Replace
Engraver HD/338/1 Year of Man-1969	Mechanical Engineering Labs	Poor	Needs critical repairs
Folding machine Year of Man-1964	Mechanical Engineering Labs	Poor	Needs serious repairs
Furnace 2 HD/339	Mechanical Engineering Labs	Poor	Requires major repairs
Furnace MS9	Mechanical Engineering Labs	Poor	Requires major repairs
Grinding machine 2 HD/347/1	Mechanical Engineering Labs	Poor	Requires major repairs
Guillotine machine Year of Man-1956	Mechanical Engineering Labs	Working	Obsolete
Hardness tester – Vickers HD/368/1	Mechanical Engineering Labs	Poor	Replace
Hardness tester – Brinel HD/366/1	Mechanical Engineering Labs	Good	Needs minor repairs
Hardness tester – Rc 2 HD/369/1	Mechanical Engineering Labs	Working	Requires major repairs
Horizontal miller HD/334/1 Year of Man-1952	Mechanical Engineering Labs	Working	Improve maintenance standards
Internal Elastics Force machine	Mechanical Engineering Labs	Poor	Improve maintenance standards
Izod testing machine Year of Man-1954	Mechanical Engineering Labs	Poor	Improve maintenance standards
Lathe machine 2 HD/331/6 Year of Man-1955	Mechanical Engineering Labs	Poor	Replace

Lathe machine 3 HD/331/7 Year of Man-1955	Mechanical Engineering Labs	Working	Requires major repairs
Lathe machine 4 HD/331/5 Year of Man-1955	Mechanical Engineering Labs	Working	Requires major repairs
Lathe machine 5 HD/331/11 Year of Man-1955	Mechanical Engineering Labs	Working	Improve maintenance standards
Lathe machine 6 HD/331/13	Mechanical Engineering Labs	Working	Requires major repairs
Lathe machine 7 HD/331/ Year of Man-1955	Mechanical Engineering Labs	Working	Requires major repairs
Lathe machine 8 HD/331/13	Mechanical Engineering Labs	Poor	Improve maintenance standards
Lathe machine 9 HD/331/12	Mechanical Engineering Labs	Poor	Improve maintenance standards
Lathe machine Year of Man-1955	Mechanical Engineering Labs	Very poor	Replace
Marking Table HD/342/1	Mechanical Engineering Labs	Working	Requires major repairs
Surface Grinder HD/336/1 Year of Man-1955	Mechanical Engineering Labs	Working	Requires major repairs
Power Guillotine Year of Man-1964	Mechanical Engineering Labs	Working	Requires major repairs
Power Saw HD/346/1 Year of Man-1970	Mechanical Engineering Labs	Working	Requires major repairs
Sensitive Drilling machine Year of Man-1969	Mechanical Engineering Labs	Working	Requires major repairs
Shaping machine MS2	Mechanical Engineering Labs	Working	Requires major repairs
Shearing machine Year of Man-1956	Mechanical Engineering Labs	Working	Requires major repairs
Smoke Tunnel	Mechanical Engineering Labs	Very poor	Replace
S/N test machine Year of Man-1954	Mechanical Engineering Labs	Working	Obsolete
Spring test Machine Year of Man-1961	Mechanical Engineering Labs	Very poor	Replace

Strain machine HD/373/1	Mechanical Engineering Labs	Working	Requires major repairs
Strut Beam Deflector Machine	Mechanical Engineering Labs	Working	Needs minor repairs
Supersonic wind tunnel	Mechanical Engineering Labs	Working	Needs minor repairs
Surface Grinder HD/337/1 Year of Man-1955	Mechanical Engineering Labs	Working	Needs minor repairs
Surface Grinder HD/336/1 Year of Man-1955	Mechanical Engineering Labs	Working	Needs minor repairs
TAC Machine	Mechanical Engineering Labs	Working	Needs minor repairs
Tensometer Machine	Mechanical Engineering Labs	Working	Ok
Thickness Planer Year of Man-1955	Mechanical Engineering Labs	Very poor	Replace
TIC Machine 2	Mechanical Engineering Labs	Working	Needs minor repairs
TIC Machine 3	Mechanical Engineering Labs	Working	Needs minor repairs
TIC Machine HD/3358/3	Mechanical Engineering Labs	Working	Needs minor repairs
Torsion Machine 2 SOM -16 HD/363	Mechanical Engineering Labs	Working	Needs critical repairs
Torsion Machine HD/358/4	Mechanical Engineering Labs	Very poor	Replace
Two stage air compressor Year of Man-1955	Mechanical Engineering Labs	Working	Obsolete
Universal test Machine 2	Mechanical Engineering Labs	Working	Improve maintenance standards
Universal testing Machine HD/358/4	Mechanical Engineering Labs	Very poor	Replace
Variable compression Engine Year of Man-1927	Mechanical Engineering Labs	Reasonable	Improve maintenance standards
Vertical milling 1 Machine HD/341/2	Mechanical Engineering Labs	Good	Requires regular maintenance

Vertical milling Machine HD/341/1 Year of Man-1969	Mechanical Engineering Labs	Reasonable	Needs serious repairs
Water pump	ED Building	Very poor	Replace
Wind tunnel machine	Mechanical Engineering Labs	Good	Needs minor repairs
Wind tunnel subsonic machine	Mechanical Engineering Labs	Good	Needs minor repairs
Working bench 2 F53-F514 Year of Man-1969	Mechanical Engineering Labs	Reasonable	Needs minor repairs
Working bench 3 HD/44/1	Mechanical Engineering Labs	Reasonable	Needs minor repairs
Working bench F53-F514 Year of Man-1969	Mechanical Engineering Labs	Reasonable	Needs minor repairs

Table 6.2.4 College of Biological and Physical Sciences Equipment Condition

Equipment	Location	Condition	Remedial Action
Drying oven	Chiromo campus- Physiology lab	Reasonable	Needs minor repairs
Weighing balance	Chiromo campus- Physiology lab	Working	Obsolete
Fridge	Chiromo campus- Physiology lab	Good	Needs minor repairs
Balance	Chiromo campus- Physiology lab	Very poor	Replace
Heater/Condenser	Chiromo campus- Physiology lab	Very poor	Replace
Centrifuge	Chiromo campus- Physiology lab	Reasonable	Needs minor repairs
Ph meter	Chiromo campus- Physiology lab	Good	Needs minor repairs
Water distiller(2)	Chiromo campus- Physiology lab	Good	Needs minor repairs
Oven	Chiromo campus- Physiology lab	Very poor	Replace
Fridge (No2)	Chiromo campus- Physiology lab	Very poor	Replace
Incubator	Chiromo campus- Physiology lab	Very poor	Replace
Fridge (No3)	Chiromo campus- Physiology lab	Very poor	Replace
Hydrant system	Chiromo campus- Physiology lab	Reasonable	Needs minor repairs
Incubator/Shaker	Chiromo campus- MIRCN lab	Very poor	Replace
Fridge	Chiromo campus- MIRCN lab	Working	Needs minor repairs
Incubator	Chiromo campus- MIRCN lab	Very poor	Replace
Microflow	Chiromo campus- MIRCN lab	Good	Needs minor repairs
Hydrant system	Chiromo campus- MIRCN lab	Good	Needs minor repairs
Fire extinguisher	Chiromo campus- SBS Block1	Good	Needs minor repairs
Fume extractor	Chiromo campus- SBS Block1 All labs	Good	Needs minor repairs

Deep freezer	Chiromo campus- SBS Block1 genetic research lab	Ok	Needs minor repairs
Fridge	Chiromo campus- SBS Block1 genetic research lab	Good	Needs minor repairs
Oven/Incubator (No2)	Chiromo campus- SBS Block1	Good	Needs minor repairs
Centrifuge	Chiromo campus- SBS Block1 genetic research lab	Good	Needs minor repairs
Microflow	Chiromo campus- SBS Block1 genetic research lab	Good	Needs minor repairs
Oven/Incubator	Chiromo campus- SBS Block1 genetic research lab	Good	Needs minor repairs
Incubator/Shaker	Chiromo campus- SBS Block1 genetic research lab	Very poor	Replace
Thin film thickness equipment Year of Man 2002	Chiromo campus- Physics Department	Good	Needs minor repairs
Vacuum pump (No2) Year of Man 1978	Chiromo campus- Physics Department RM230C	Good	Needs minor repairs
Fridge	Chiromo campus- Physics Department RM230C	Good	Needs minor repairs
Cooling system	Chiromo campus- Physics Department RM230C	As New	As New
Fire extinguisher	Chiromo campus- Physics Department RM230C	Good	Needs regular maintenance
Furnace	Chiromo campus- Physics Department RM224A	Good	Needs minor repairs
Chiller Year of Man 1995	Chiromo campus- Physics Department RM230C	Good	Needs minor repairs
Toilet extractor	Chiromo campus- Physics Department All toilets	Poor	Replace
Fire extinguisher	Chiromo campus- Chemistry Department	Good	Needs minor repairs

	All labs		
Fume extractor	Chiromo campus- Chemistry Department All labs	Reasonable	Needs minor repairs
Oven	Chiromo campus- Chemistry Department Analytical lab	Good	Needs calibration
Oven (No6)	Chiromo campus- Chemistry Department All labs	Good	Needs minor repairs
Furnace	Chiromo campus- Chemistry Department All labs	Good	Needs minor repairs
Air pump	Chiromo campus- Chemistry Department Analytical lab	Reasonable	Needs minor repairs
Toilet extractor	Chiromo campus- Chemistry Department All labs	Poor	Replace
Air compressor	Chiromo campus- Chemistry Department Basement	Good	Needs minor repairs
Air conditioner	Chiromo campus- Chemistry Department Basement	Reasonable	Needs minor repairs
Ice maker (No2)	Chiromo campus- Chemistry Department G26	Very poor	Replace
Hydrant system	Chiromo campus- Chemistry Department All floors	Very poor	Replace
Oven (No3)	Chiromo campus- New 844 Phy-Chem lab	Good	Needs minor repairs
Top pan balance	Chiromo campus- New 844 Phy-Chem lab	Reasonable	Needs minor repairs
Analytical balance (No2)	Chiromo campus- New 844 Phy-Chem lab	Reasonable	Needs minor repairs
Bomb calorimeter	Chiromo campus- New 844 Phy-Chem lab	Good	Needs minor repairs
Bomb calorimeter (No2)	Chiromo campus- New 844 Phy-Chem lab	Reasonable	Needs majorr repairs
Emergency shower (No3)	Chiromo campus- New 844 Phy-Chem lab	Reasonable	Needs minor repairs
Fan (No3)	Chiromo campus- New 844 Phy-Chem lab	Good	Needs minor repairs

Fume extractor	Chiromo campus- New 844 Phy-Chem lab	Good	Needs minor repairs
Fire extinguisher (No4)	Chiromo campus- New 844 Phy-Chem lab	Good	Needs regular maintenance
Fire system	Chiromo campus- New 844 Phy-Chem lab	Good	Needs regular maintenance
Nuclear magnetic resonance equipment	Chiromo campus- New 844 Phy-Chem lab	Reasonable	Needs minor repairs
Universal milling machine Year of Man 1970	Chiromo campus- Physical science bldg metal fabrication	Good	Needs minor repairs
Surface grinder Year of Man 1970	Chiromo campus- Physical science bldg metal fabrication	Reasonable	Obsolete
Lathe machine (No3)	Chiromo campus- Physical science bldg metal fabrication	Reasonable	Needs minor repairs
Lathe machine (No1)	Chiromo campus- Physical science bldg metal fabrication	Reasonable	Needs minor repairs
Engraving machine	Chiromo campus- Physical science bldg metal fabrication	Reasonable	Needs minor repairs
Shaping machine	Chiromo campus- Physical science bldg metal fabrication	Reasonable	Needs minor repairs
Tool grinder	Chiromo campus- Physical science bldg metal fabrication	Reasonable	Obsolete
Pillar grinder	Chiromo campus- Physical science bldg metal fabrication	Reasonable	Needs minor repairs
Band saw	Chiromo campus- Physical science bldg metal fabrication	Very poor	replace
Shearing machine	Chiromo campus- Physical science bldg metal fabrication	Reasonable	Needs serious repairs
Box bender	Chiromo campus- Physical science bldg metal fabrication	Good	Needs minor repairs
Roller	Chiromo campus- Physical science bldg sheet metal	Good	Needs minor repairs

Hydraulic press	Chiromo campus- Physical science bldg metal fabrication	Reasonable	Needs serious repairs
Bench drill	Chiromo campus- Physical science bldg metal fabrication	Reasonable	Needs minor repairs
Sand blast machine	Chiromo campus- Physical science bldg metal fabrication	Good	Needs minor repairs
Glass cutting machine	Chiromo campus- Physical science bldg Glass blowing lab	Reasonable	Needs minor repairs
Glass annealing oven	Chiromo campus- Physical science bldg Glass blowing lab	Good	Needs minor repairs
Glass blowing torch	Chiromo campus- Physical science bldg Glass blowing lab	Good	Needs minor repairs
Glass lathe machine	Chiromo campus- Physical science bldg Glass blowing lab	Reasonable	Needs minor repairs
Radial arm saw	Chiromo campus- Physical science bldg Wood work lab	Good	Needs minor repairs
Bench drill	Chiromo campus- Physical science bldg Wood work lab	Good	Needs minor repairs
Belt sander	Chiromo campus- Physical science bldg Wood work lab	Good	Needs minor repairs
Surface planer (No2)	Chiromo campus- Physical science bldg Wood work lab	Good	Needs minor repairs
Band saw	Chiromo campus- Physical science bldg Wood work lab	Good	Needs minor repairs
Wood lathe (No2)	Chiromo campus- Physical science bldg Wood work lab	Good	Needs minor repairs
Mortiser	Chiromo campus- Physical science bldg Wood work lab	Good	Needs minor repairs
Thickenesser	Chiromo campus- Physical science bldg Wood work lab	Good	Needs minor repairs

Circular saw	Chiromo campus- Physical science bldg Wood work lab	Very poor	Replace
Power saw	Chiromo campus- Physical science bldg Store	Reasonable	Needs minor repairs
Compressor	Chiromo campus- Physical science bldg Store	Good	Needs minor repairs
Fire extinguisher Year of man 2008	Chiromo campus- Physical science bldg Store	Reasonable	Needs minor repairs
Fire extinguisher Year of man 2009	Chiromo campus- Admin offices	As New	As New
Fridge	Chiromo campus- Admin Principal's office	Good	Needs minor repairs
Back up generator Year of man 2005	Chiromo campus- Admin	Good	Needs minor repairs
Bore hole pump Year of man 2005	Chiromo campus- Admin	Reasonable	Needs minor repairs
Fire system Year of man 2007	Chiromo campus- New 844 bldg	Reasonable	Needs minor repairs
Alarm system Year of man 2007	Chiromo campus- New 844 bldg	As New	As New
Cooling system Year of man 2009	Chiromo campus- SCI/ICT	As New	As New
Back up generator Year of man 1990	Chiromo campus- SCI/ICT	Reasonable	Needs minor repairs
Alarm system Year of man 2000	Chiromo campus- SCI/ICT	Good	Needs minor repairs
UPS Year of man 2009	Chiromo campus- SCI/ICT	Good	As New

Table 6.2.5 College of Education and External Studies Equipment Condition

Equipment	Location	Condition	Remedial Action
Binding Machine	KIKUYU- Printing Section	Good	Needs minor repairs
Generator	Kikuyu Campus	As New	As New
Praktika Machine	Printing Section	Very poor	Replace
Printing machine(2No)	Printing Section	Good	Needs minor repairs

Table 6.2.6 Students Welfare Authority Equipment Condition

Equipment	Location	Condition	Remedial Action
Boclea	SWA – CCU Grounds	Very poor	Replace
Booster Pump	SWA	Very poor	Replace
Borehole	SWA- Mamlaka	As New	As New
Cold Room	SWA- CCU Kitchen	Very poor	Replace
Electronic Scale	SWA- CCU	Very poor	Replace
Elevator	SWA- CCU	Very poor	Needs serious repairs
Fire Fighting Equipment	SWA - Hall	Very poor	Replace
Mechanical Scale	SWA- CCU	Poor	Improve maintenance standards
Potato Peeler	SWA - Mamlaka	Very poor	Replace
Pump	SWA- Prefab	Needs critical repairs	Improve maintenance standards
Welding Machine	SWA - CCU	Needs serious repairs	Replace
Wood Cutter	SWA - CCU	Needs serious repairs	Replace

Table 6.2.7 University of Nairobi Enterprises and Services Equipment Condition

Equipment	Location	Condition	Remedial Action
Air Conditioning Unit	UHS	Poor	Needs minor repairs
Power Generator	UHS	As New	As New
Power Generator No 2	UHS	As New	As New

6.3: ICT Equipment Condition Rating

Table 6.3.1 ICT Equipment in Various campuses

Location	Equipment	No.	Overall Assessment	Remedial Action
Lower Kabete – Tuition Block	Computers	Between 31 -100		Needs Preventive Maintenance at least twice a year
	Laptops	-		
	Computer Printers	-		
	LCD's	-		
	UPS's	-		
	Scanners	-		
	Networking Switches	-		
	Photocopiers	-		
	Servers	-		
Valid XP, LINUX & WIN 2000	Yes			
Parklands Campus- Commercial law	Computers	Between 31 -100		Needs Major repairs and/or replacement
	Laptops	-		
	Computer Printers	-		
	LCD's	-		
	UPS's	-		
	Scanners	-		
	Networking Switches	-		
	Photocopiers	-		
	Servers	-		
Valid XP, LINUX & WIN 2000	Yes			
Main Campus – Library	Computers	Between 31 -100		Needs preventive maintenance at least twice a year
	Laptops	-		
	Computer Printers	Between 6-10		
	LCD's	-		
	UPS's	Between 11-30		
	Scanners	Between 1-5		

	Networking Switches	-		
	Photocopiers	-		
	Servers	Between 1-3		
	CCTV installed	Yes		
	Valid XP, LINUX & WIN 2000	Yes		
Faculty of Arts and IDS	Computers	Between 31 -100	Good	Needs preventive maintenance at least twice a year
	Laptops	-		
	Computer Printers	Between 11-30		
	LCD's	-		
	UPS's	31-100		
	Scanners	Between 1-5		
	Networking Switches	Above 6		
	Photocopiers	-		
	Servers	-		
	Valid XP, LINUX & WIN 2000	Yes		
Lower Kabete-ICT Section	Computers	Between 31 -100	Very Good	Needs preventive maintenance at least twice a year
	Laptops	-		
	Computer Printers	Between 11-30		
	LCD's	-		
	UPS's	Between 31-100		
	Scanners	Between 1-5		
	Networking Switches	Between 1-3		
	Photocopiers	-		
	Servers	-		
	Valid XP, LINUX & WIN 2000	Yes		

CAVS Economics	Computers	Between 31 -100	Good	Needs preventive maintenance at least twice a year
	Laptops	Between 1-5		
	Computer Printers	Between 1-5		
	LCD's	Between 1-5		
	UPS's	Between 31 -100		
	Scanners	Between 1-5		
	Networking Switches	Between 4-5		
	Photocopiers	-		
	Servers	-		
	Valid XP, LINUX & WIN 2000	Yes		
CHS -Library	Computers	Between 31 -100	Good	Needs preventive maintenance at least twice a year
	Laptops	Between 1-5		
	Computer Printers	Between 1-5		
	LCD's	Between 1-5		
	UPS's	Between 31 -100		
	Scanners	Between 1-5		
	Networking Switches	Between 4-5		
	Photocopiers	-		
	Servers	-		
	Valid XP, LINUX & WIN 2000	Yes		
Kenya Science-Tuition Block	Computers	Between 31 -100	Good	Needs Preventive at least twice a year
	Laptops	-		
	Computer Printers	Between 1-5		
	LCD's	Between 1-5		

	UPS's	Between 31 -100		
	Scanners	Between 1-5		
	Networking Switches	Above 6		
	Photocopiers	-		
	Servers	Between 1-3		
	Valid XP, LINUX & WIN 2000	Yes		
CAVS– Public Health Dept	Computers	Between 31 -100	Reasonable	Needs minor repairs and preventive maintenance at least twice a year
	Laptops	Between 11-30		
	Computer Printers	Between 11-30		
	LCD's	Between 1-5		
	UPS's	Between 11-30		
	Scanners	Between 1-5		
	Networking Switches	-		
	Photocopiers	-		
	Servers	-		
	Valid XP, LINUX & WIN 2000	Yes		
CHS–School of Medicine	Computers	Between 31 -100	Good	Needs minor repairs and preventive maintenance at least twice a year
	Laptops	-		
	Computer Printers	Between 11-30		
	LCD's	Between 11-30		
	UPS's	Between 31 -100		
	Scanners	Between 1-5		
	Networking Switches	Above 6		
	Photocopiers	-		
	Servers	-		

	Valid XP, LINUX& WIN 2000	Yes		
CHS –School of Pharmacy	Computers	Between 31 -100	Good	Needs minor repairs and preventive maintenance at least twice a year
	Laptops	Between 6-10		
	Computer Printers	Between 11-30		
	LCD's	Between 6-10		
	UPS's	Between 31 -100		
	Scanners	-		
	Networking Switches	-		
	Photocopiers	-		
	Servers	-		
	Valid XP, LINUX& WIN 2000	Yes		
Lower Kabete – Tuition Block	Computers	Between 31 -100	Reasonable	Preventive Maintenance at least twice a year
	Laptops	-		
	Computer Printers	Between 1-5		
	LCD's	Between 1-5		
	UPS's	Between 11 -30		
	Scanners	Between 1-5		
	Networking Switches	Above 6		
	Photocopiers	-		
	Servers	-		
	Valid XP, LINUX& WIN 2000	Yes		
Main Campus – School of Business Lab.& Offices	Computers	Between 11 -30	Good	Preventive Maintenance at least twice a year
	Laptops	-		
	Computer Printers	Between 6-10		
	LCD's	-		

	UPS's	Between 11 -30		
	Scanners	Between 1-5		
	Networking Switches	-		
	Photocopiers	-		
	Servers	-		
	Valid XP, LINUX & WIN 2000	Yes		
CAVS –Land. Resources	Computers	Between 11 -30	Poor	Needs Major repairs and/or replacement
	Laptops	Between 1-5		
	Computer Printers	Between 1-5		
	LCD's	Between 1-5		
	UPS's	Between 6 -10		
	Scanners	-		
	Networking Switches	Between 1-3		
	Photocopiers	-		
	Servers	-		
	Valid XP, LINUX & WIN 2000	Yes		
Chiromo Campus Science Building	Computers	-	Best	Preventive Maintenance at least twice a year
	Laptops	-		
	Computer Printers	Between 1-5		
	LCD's	Between 1-5		
	UPS's	-		
	Scanners	-		
	Networking Switches	-		
	Photocopiers	-		
	Servers	-		
	Valid XP, LINUX & WIN 2000	Yes		

Lower Kabete – Library	Computers	Between 1 -5	Good	Preventive Maintenance at least twice a year
	Laptops	-		
	Computer Printers	Between 1-5		
	LCD's	-		
	UPS's	Between 1-5		
	Scanners	-		
	Networking Switches	-		
	Photocopiers	-		
	Servers	-		
	Valid XP, LINUX & WIN 2000	Yes		
Moana Research Station	Computers	Between 1-5	Best	Preventive Maintenance at least twice a year
	Laptops	-		
	Computer Printers	Between 1-5		
	LCD's	Between 1-5		
	UPS's	-		
	Scanners	-		
	Networking Switches	-		
	Photocopiers	-		
	Servers	-		
	Valid XP, LINUX & WIN 2000	Yes		
Lower Kabete – Old Admin Block	Computers	Between 1-5	Good	Preventive Maintenance at least twice a year
	Laptops	-		
	Computer Printers	Between 1-5		
	LCD's	-		
	UPS's	Between 1 -5		
	Scanners	-		
	Networking Switches	Between 4-5		
	Photocopiers	Between 1-3		

	Servers	-		
	Valid XP, LINUX & WIN 2000	Yes		
Kikuyu-Printing Section	Computers	Between 1-5	Reasonable	Preventive Maintenance at least twice a year
	Laptops	-		
	Computer Printers	-		
	LCD's	-		
	UPS's	-		
	Scanners	-		
	Networking Switches	-		
	Photocopiers	-		
	Printing Machines	Between 1-3		
	Valid XP, LINUX & WIN 2000	Yes		
Parklands Campus-Admin & SWA	Computers	Between 1-5	Poor	Needs Major Repair
	Laptops	-		
	Computer Printers	Between 6-10		
	LCD's	-		
	UPS's	-		
	Scanners	-		
	Networking Switches	-		
	Photocopiers	-		
	Printing Machines	-		
	Valid XP, LINUX & WIN 2000	Yes		

7. THE MAINTENANCE POLICY COMMITTEE

<u>Name</u>			<u>Date</u>	<u>Signature</u>
1. Prof Paul M. Syagga	-	Chairman	.....	.....
2. Dr. Sylvester M. Masu	-	Member	.....	.....
3. Mr. Tracisio M. Thuita	-	Member	.....	.....
4. Dr. Tom C. Anyamba	-	Member	.....	.....
5. Prof. David N. Mungai	-	Member	.....	.....
6. Ms. A. Yohannes-Mbathi	-	Member	.....	.....
7. Mr. Joseph M. N. Kanyugo	-	Member	.....	.....
8. Dr. Eng. Julius Ogola	-	Member	.....	.....
9. Mr. Joseph M. Mokaya	-	Member	.....	.....
10. Mr. John Aduol	-	Member	.....	.....
11. Ms. Elizabeth W. Gachithi	-	Member	.....	.....
12. Mr. Fredrick W. Kachero	-	Secretary	.....	.....