



# **JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

## **ENVIRONMENT POLICY**

**October 2016**

**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**ENVIRONMENT POLICY**

**2016**

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ENVIRONMENTAL POLICY

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**Signed:**



Vice-Chancellor, Secretary to Council      Date  
Prof. S. G. Agong'

16/12/2016



Chairman of Council  
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Date

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**PREAMBLE**

Current global trends on environmental management elaborate on complementary strategies of harmonizing sustainable management of natural resources and development without harming the environment. The key objective is to ensure that all development policies, programmes and projects take environmental considerations into account. In that regard, Kenya Vision 2030, which is the Government's new long term national planning strategy, focuses on equitable social development in a clean and secure environment.

The aspect of waste management through sustainable approaches encompasses enhanced re-use/recycling of residues including waste water, adoption of low non-waste technologies, increased public awareness, and use of waste disposal facilities and appreciation of clean environment. These take prominence in the government policies on environment. Participation of stakeholders in the management of waste within their localities are equally encouraged for a clean and healthy environment.

The need for high level environmental conscience in a University setting is critical because of the unique activities of the University as a center for production of empirical knowledge. Society also looks up to the Universities for solutions to environmental problems and therefore Universities must be seen as live environmental solutions unto themselves. It is also a Government requirement that all Ministries, Departments and Agencies (MDAs) subscribe to environmental mainstreaming and sustainability. To ensure compliance, the Government through National Environmental Management Authority (NEMA) has introduced mainstreaming environmental sustainability as a cross-cutting Performance Contract deliverable for the MDAs since 2011/12 financial year.

Jaramogi Oginga Odinga University of Science and Technology which is uniquely situated in a rural setting on the shores of Lake Victoria endeavours to uphold exemplary performance in environmental matters. For this reason, the University has developed a comprehensive Policy to guide mainstreaming environmental sustainability in its programmes and operations.

**LIST OF ABBREVIATIONS AND ACRONYMS**

3R	Reduction, Recycling and Reuse
EA	Environmental Audit
EHS	Environmental Health and Safety
EIA	Environmental Impact Assessment
EMCA	Environmental Management and Coordination Act
EMP	Environmental Management Plan
GHGs	Green House Gases
JOOUST	Jaramogi Oginga Odinga University of Science and Technology
MDAs	Ministries, Departments and Agencies
NEMA	National Environmental Management Authority
OHS	Occupational Health and Safety
OVI	Objectively Verifiable Indicators
PAF	Planning, Administration and Finance
SOP	Standard Operating Procedures
SWM	Sustainable Waste Management

**DEFINITION OF TERMS**

**(a) University Management Board**

The body responsible for administrative matters in the University and the final authority on all such matters. It is the organ for control of administrative quality and quality assurance

**(b) Environment**

The physical and biological habitat that surrounds us including all the living and non-living factors that make the surrounding of man. It includes the physical (air, water and land), biological (plants, animals and microbial organisms) and cultural (society, economy, and political).

**(c) Sustainability**

Sustainability is living within limits, understanding the interconnections between economy, society and environment and equitable distribution of resources and available opportunities.

**(d) Sustainable Development**

Sustainable development is the development that meets the needs of the present generation without compromising the ability of future generations to meet their needs.

**(e) Environmental Sustainability**

Environmental sustainability refers to protection, sustainable management and utilization of ecosystems natural resources by ensuring equitable access to, and governance of ecological goods and services.

**(f) Environmental Mainstreaming**

To achieve environmental sustainability, we need to integrate environmental concerns into decisions of institutions that drive sector development policies, rules, plans and actions. Mainstreaming requires that environmental considerations be incorporated into decision making within all development sectors and across all segments of an organization in order to reverse loss of environmental resources.

## **1.0 INTRODUCTION**

### **1.1 Rationale**

The purpose of this Policy is to achieve coordinated and consistent environmental operational practices in JOOUST. It sets out the principles underpinning the management of environment in the University and its vicinity which is a key component in the pursuit of University's stated objectives.

### **1.2 Policy Statement**

Jaramogi Oginga Odinga University of Science and Technology (JOOUST) is committed to environmental stewardship in all its operations in teaching, research, outreach and consultancy. JOOUST has a reputable corporate Policy of providing a safe and healthy work place, protecting the environment, and conserving energy and natural resources. The Policy ensures consistent principles are applied across the University in mainstreaming environmental sustainability into the operations of JOOUST

### **1.3 Policy Framework**

The administrative framework of the Policy rests with University Management Board which encompasses;

- (a) Decision making on administrative Policy matters affecting the University.
- (b) Creating conducive environmental conditions in which staff, students and adjoining communities are able to work.
- (c) Ensuring adoption of basic rules of sustainability in the conduct of University business.

### **1.4 Policy Objectives**

- (a) To guide in mainstreaming environmental sustainability into the operations of JOOUST.
- (b) To comply with applicable environmental legal requirements in the country and voluntary requirements to which JOOUST subscribes.
- (c) To provide a safe and healthy workplace.
- (d) To be an environmentally responsible neighbour in the communities where JOOUST operates.
- (e) To enhance participation in scientific, technological and innovative efforts to improve environmental sustainability.
- (f) To create awareness on relevant environmental issues among stakeholders.

### **1.5 Policy Principles**

- (a) The guiding principles for the environmental sustainability policy for the University shall be the principles of result based management and environmental sustainability anchored on environmental principles as provided by the Constitution of Kenya and Environmental Management and Coordination Act EMCA No.8 of 1999.

- (b) The University operates within the environmental principles as enshrined in EMCA No.8 of 1999, such as the principles of environmental sustainability, precautionary principle, polluter- pays principle and the principle of public participation.

## 2.0 SITUATION ANALYSIS

The current environmental status of the University can be summarized as follows: The University being an academic institution, its operations and boarding facilities generates large quantities of solid waste, especially food waste, paper and e-waste which requires a comprehensive waste management systems encompassing the 3R principles. Therefore, policy guidelines are necessary for adequate treatment and safe disposal. As a research and teaching institution, the University is a generator of hazardous laboratory and medical wastes, whose handling and disposal need to comply with relevant regulations. The University also disposes several items some which include construction materials, old vehicles, batteries, used computers and consumables such as tonners and used chairs. These used items have environmental impacts which require safe disposal.

The University is experiencing rapid expansion, which means procurement activities are large and diverse. This require interrogation of procurement of services in relation to compliance with environmental sustainability requirements. Some of the goods and services procured by the University include, vehicle maintenance, laboratory equipment, computers, electrical appliances and many others.

The University uses power from national grid to power its activities. However, because of frequent power outages in Bondo, there is a standby generator that is turned on for continuous power supply. The quantity of electricity consumed ought to be monitored per department and energy use audits done. With the continuous increase of student numbers, energy savings initiatives are a necessity.

The University has its own water supply from River Yala and also operates its own waste stabilisation ponds for domestic waste treatment. Currently there is an on-going water supply and sewerage system development in Bondo town into which the University is considering linking its system. These facilities require operation within the set standards and close monitoring to avoid any negative environmental effects.

The University has put in place several structures and measures to ensure environmental requirements and concerns are adequately addressed. JOOUST is ISO 9001-2008 certified and has developed Standard Operating Procedures (SOPs) that guide its internal and external activities. The SOPs should be in line with the Environmental Policy objective of mainstreaming environmental sustainability into the operations of JOOUST.

The University has a Disposal Committee which is mandated to dispose of assets of the University from time to time in the most appropriate and environmentally sustainable manner. With its strong outreach programmes, the University participates in research and

implementation of programme touching on climate change and emission of Green House Gases such as tree planting. The staff of the University are regularly sensitized on environmental knowledge, habits and values. These are key ingredients to a person's attitudes influencing behavior.

Despite the measures already being taken by the University, there is more need to reinforce the levels of environmental awareness and compliance with regulations through training and policy.

The University is situated in a solar rich zone for which solar energy utilization is desirable. In addition, being located in a malarial and typhoid endemic zone, the University will utilize environment friendly approaches in containing and managing this problem.

### **3.0 ENVIRONMENTAL SUSTAINABILITY**

#### **3.1 Water use and liquid waste**

- (a) The University shall enhance the programme which promotes water saving culture.
- (b) The University shall maintain effluent standards before discharging into natural water courses. In addition the University shall maintain standards of portable water. Maintain a monitoring and evaluation programme for both sewage and water treatment systems.

#### **3.2 Procurement of Services and equipment**

The University shall procure institutional services and equipment in compliance with the University's regulation and environmental sustainability.

#### **3.3 Disposal of University assets**

The University shall dispose of institutional assets and parts of equipment in compliance with the waste regulation and environmental sustainability.

#### **3.4 Energy supply and use**

The University shall enhance energy conservation regime to reduce institutional consumption and cost and expand alternative sources of energy to supplement sources from the National grid.

#### **3.5 Solid waste generation and disposal**

The University shall minimise waste generation to optimum levels through sustainable routine good practices and disposal methods like 3R principles.

#### **3.6 Hazardous and medical waste**

The University shall strengthen management of hazardous liquid waste both in laboratories and health units.

#### **3.7 Climate change and carbon footprints**

The University shall review and implement changes in the institution programs, structures, equipment and practices to allow reduction of the Institutions footprints to acceptable levels. Participate in carbon sink initiatives such as tree planting.

### **3.8 Standard operating procedures**

- (a) The University shall regularly review the Standard Operating Procedures (SOPs) of to make them responsive to climate change resilience and low carbon growth provisions and environmental sustainability.
- (b) The University shall regulate and revise the procedures and systems in order to enhance stakeholders engagement and participation in the University decisions making, particularly in matters of compliance.

### **3.9 Environmental mainstreaming and proofing**

The University shall mainstream climate change and environmental sustainability into University policies, plans and programme

### **3.10 Management system**

The University shall review inputs, products and services and evaluate their impact to the upstream and downstream environments with a view to ensuring sustainability.

### **3.11 Knowledge management**

The University shall enhance collection and maintenance of environmental information and strengthen systems that will provide increased access to information to all stakeholders and the public.

### **3.12 Staff attitude**

- (a) The University shall continue to train staff and students in order to provide them with the skills and right attitude to carry on work of environmental sustainability for their organizations.
- (b) The University shall be a model of environmental sustainability by providing leadership and show- casing environmental sustainability initiatives.

### **3.13 Environmental Impact Assessment and Auditing (EAI/EA)**

An Environmental Impact Assessment (EIA) ensures that decisions on proposed projects and activities are environmentally sustainable. The EIA must be conducted before the commencement of a project and in compliance with The Environmental (Impact Assessment and Audit) Regulations, 2003. JOOUST will conduct an EIA and prepare a report and submit to NEMA. The EIA will be done by a registered and licensed EIA/EA expert by NEMA.

An Environmental Audit (EA) is the systematic documentation, periodic and objective evaluation of activities and processes of an ongoing project to determine the extent to which the activities and programs conform to the approved Environmental Management Plan. The initial environmental audit and a control audit are conducted by a qualified and authorized environmental auditor or environmental inspector who is an expert or a firm of experts registered by NEMA. In the case of an ongoing project JOOUST will undertake an initial environmental audit study to provide baseline information upon which subsequent environmental audits shall be based.

## **4.0 ENVIRONMENTAL SUSTAINABILITY STRATEGY**

### **4.1 Liquid waste**

The University shall undertake a continuous assessment of the University's treatment systems to determine their efficiency with respect to statutory standards as regulated by EMCA No.8 of 1999 and other relevant regulations.

### **4.2 Procurement of services and equipment**

The University shall evaluate contracted service providers and the contracts to determine the level of compliance to EMCA No.8 of 1999, its related regulations and other environmental regulations and environmental sustainability.

### **4.3 Disposal of University assets**

The University shall evaluate the contracted suppliers of equipment, production and performance of equipment to determine level of compliance to NEMA regulations, other regulations and environmental sustainability.

### **4.4 Energy supply and use**

The University shall assess and re-examine the specifications of the equipment to establish the carbon footprints, examine the value chain and establish level of certification by an accredited environmental certification body such as ISO 14000

### **4.5 Climate change and carbon footprints**

The University shall annually conduct an energy audit and determine the energy budget by department and establish related carbon footprint and subsequently develop an energy saving plan and install solar panels to provide alternative source of green energy and improve the carbon footprints of the University.

### **4.6 Water supply and use**

- (a) The University shall annually conduct a water audit to establish water budget and characterize integrity of water use equipment and enhance the alternative sources of water in use such as the roof catchment.
- (b) The University shall maintain and repair all equipment to reduce loss of water and encourage judicious use, improve signage and the attitude of staff to encourage saving of water.

### **4.7 Standard operating procedures**

The University shall annually conduct a waste audit to determine type, source areas and level of generation of waste in the institution and design an appropriate management system including separation at source and disposal according to waste regulation.

The University shall conduct a carbon footprint audit on appliances and structures and redesigns the structures to maximise on use of natural sources of light, energy, wind circulation and improve the foot prints of the University.

### **4.8 Environmental mainstreaming and proofing**

- (a) The University shall review standard operating procedures to enhance environmental sustainability and climate change sensitivity in existing SOPs and develop suitable SOPs where they are lacking.
- (b) The University shall analyse Annual plans, strategic plan, policies programmes and projects and identify gaps for mainstreaming environment sustainability and climate change.

- (c) The University shall mainstream environmental sustainability and climate change particularly focusing on strategic plan, annual work-plans, projects and programmes, procedures, standards, regulations and prioritize sectors for immediate environmental sustainability and climate change mainstreaming through the process of the state of environmental reporting.

#### **4.9 Management system**

- (a) The University shall prepare and apply for certification to ISO 14000, which is an environmental sustainability compliant certification and endeavour to acquire accreditation as a perfect review of environmental sustainability for MDAs.
- (b) The University shall identify and document the inputs and those providing the products and services consumed by the University and understand their environmental, social and economic impacts and mainstream sustainability in those particular areas
- (c) The University shall identify and document the products and services of the University and understand their environmental, social and economic impact to the consumers and the environment and mainstream environmental sustainability.

#### **4.10 Knowledge management**

The University shall strengthen systematic information collection and research and design information systems that are user friendly in order to improve access to environmental information. This can be achieved through promoting networks and participation in environment information platforms.

#### **4.11 Staff and students attitude**

The University shall integrate environmental sustainability programme for training of students and sensitization of staff and our stakeholders.

#### **4.12 Sustainable exploitation of environment friendly approaches**

The University will utilize its prime location to maximize use of solar energy and at the same time mitigate on the malarial and typhoid breeding grounds.

### **5.0 POLICY IMPLEMENTATION**

#### **5.1 Structures and Systems**

The implementation of the Environmental Sustainability Policy in the University will be coordinated by the environmental committee appointed by the Vice- Chancellor.

#### **5.2 Monitoring Reports**

Monitoring reports will be filed with the departmental heads and the Performance Contracting Unit of the University Performance reporting

#### **5.3 Performance Reports**

The University shall develop performance reporting guidelines with Objectively Verifiable Indicators (OVI) to help track the progress of achievement of this Policy.

### **6.0 INTERPRETATION AND REVIEW OF THE POLICY**

- (a) The Council shall be the final authority in the interpretation of the Environment Policy.
- (b) The Environment Policy is subject to review every three years and when there is a change in the law governing the environment or as the need arises.