

MAKERERE UNIVERSITY
DEPARTMENT OF GEOLOGY AND PETROELUMS STUDIES
STRATEGIC PLAN 2020-2030

Mission statement: To create and impart knowledge in both pure and applied geology and petroleum geoscience to society through innovative teaching, research and services, taking into perspective global needs.

3 GOALS

3.1.1. Goal: Teaching and Learning:

Objectives

- Improve the current ICT capacity to enhance e-learning, increase access to the internet, design modern website for the Department.
- To increase the use of electronic academic sources for staff and students.
- Incorporate gender into the Department's programmes during admission of students and staff recruitment
- Review and design new programmes in collaboration with partners within the region and internationally.
- Continue collaboration with other institutions in the country in region and the world
- Introduce course modules within the curriculum like; geohazards, medical geology, agrogeology, geothermal.
- Introduce more short courses to serve stakeholders and public

Performance indicators

- Increase use of ICT facilities
- Increased access to ICT by staff and students
- Number of new courses introduced and those revised
- Number of short courses conducted and attended
- Collaborations with other institutions

Inputs

- Facilitation of Workshops/Seminars/Meetings
- Computer laboratories
- Updated website
- IT technician

3.1.2. Goal: Research and Innovations:

Objectives

- Promote both basic and applied innovative research in the department
- Coordinate research within the Department to ensure value to individuals, the university and nation
- Continue to promote interdisciplinary collaborative research locally /internationally
- Endeavor to attract more graduate students into the Department's programmes.
- To continue engaging the private sector to increase entrepreneurship ability of staff and students in areas such as groundwater exploration, petroleum, mineral exploration, EIAs, etc.
- Continue to develop strategies that will involve female staff and students in research and publications.
- To promote the use and application of traditional, conventional and emerging technologies for sustainable development.
- Encourage and/or promote publication of research findings in local, regional and international peer reviewed journals and the World Wide Web (www).
- Write manuscripts, books and contribute chapters in edited books.

Activities

- Proposal writing
- Establishing new modern laboratories equipped with modern equipment
- Encourage students and staff to attend research and innovation conferences
- Continue to develop strategies that will involve female staff and students in research and publications

Performance Indicators

- Number of Publications
- Number of grant proposals written
- Increased numbers of students admitted into the department
- Number of seminars /workshops/conference involving the public and private sectors
- Percentage of female staff/students doing research

3.1.3. Goal: Outreach:

- To increase the capacity of the Department to link with and serve the society, public and other sectors

Objectives:

- Increase the participation of the Department in outreach and community development programmes.
- To offer advice to government on policies concerning sustainable use of earth resources.
- Engage the community in research and in the dissemination of relevant information.
- Enhance the Department's ability to become a referral institution for geosciences.
- Improve consultancy in earth related resources.
- Engage the government and the community on geohazards for example: landslides, earthquakes,
- Expand the existing Departmental museum.
- To ensure that outreach programmes are gender mainstreamed.

Performance Indicators

- Number of outreach activities (workshops/seminars)involving the community
- Number of polices in which the department has contributed to
- Information disseminated to the community
- Consultancy work engaged in by staff/students in the department

3.2.1 Organization and management

Goal: Restructuring the Department

Objective:

- Transform the department into a school of Geology and Petroleum Studies with a number of Departments.

Activities

- Increase student enrolment.
- Filling the current staff establishment and expanding it.
- Establishing new facilities liking teaching laboratories and staff offices.
- Establishing 02 field stations
- Purchasing of field vehicles (03)

Performance Indicators

- Number of students admitted
- Filled and expanded establishment
- SPACE for staff offices, Lecture rooms and laboratories
- Established field stations
- Vehicles Purchased

3.2.2 Goal : Quality Assurance (QA) System

Objectives:

Maintain and improve an effective and efficient Quality Assurance (QA) system to conform to the set standards by the National Council of Higher Education (NCHE) and internationally.

Activities

- Employ highly skilled quality staff
- Training
- E-Learning
- Continuous assessment of students and staff
- Increase the number of external examiners
- Encourage students and staff to write projects and attend research and innovation conferences.
- Emphasize collaboration research projects, staff and students exchange programs.

Performance Indicators

- Number of staff trained/promoted and number of professors
- More staff publishing
- Number of conferences organized and attended by department members
- Number of students getting good degrees, being employed
- Maintaining a linkage between the employers of students and the department.
- Increase use of ICT and modern Laboratory equipment in teaching and research.
- Number of collaborative projects run by the department
- Number of innovations

Inputs

Webcams, touch pads, smart board computers, ICT Technician, modern laboratory equipment, research funds, workshop/seminar facilitation

3.2.3 Human Resource

Objectives:

- Aim at increasing the current and expand staff establishment
- Aim at having 4 Professors and 5 Associate Professors
- Encourage both male and female academic staff to go for PhD training
- Increase the female academic and non-academic staff.

- Encourage female academic staff to enhance their academic growth and aim at having atleast 50% of them promoted to the level of Associate Professor
- Aim at having at least 4 professors and 5 associate professors
- Encourage staff to go for refresher courses /workshops/seminars

Performance Indicators

- Increase number of female staff.
- Increase number of professors and associate professors.
- Establishment expanded and filled up to 90%
- Number of staff with PhDs
- Number of refresher courses/workshops/seminars attended

3.2.4 Library Services

Access to on-line library services

Objectives:

- Strive to establish a virtual library
- Increase access and use of the Departmental library collection and map room.
- Management should purchase new editions of books and journals.
- Acquire digitized new maps and old ones.

3.2.5 Information Communication Technology

Objectives:

- To harness ICTs to improve teaching, learning, research and outreach
- To increase access to ICT facilities in the Department for academic and support staff plus graduate and undergraduate students.
- Have all lecture rooms and offices connected to MAKnet
- Integrate ICT in management and administration
- Integrate all courses in e-learning modules.

Performance Indicators

- Increased used of ICT in teaching, learning and innovations and research
- Increased number of ICT equipment

Inputs

LCDs, smart boards, computers, student access points, expand staff access ports in offices and laboratories, IT technician

3.2.6 Gender Mainstreaming

Objectives:

- To maintain gender equality and equity for both academic and non-academic staff.
- To recast the curriculum to include gender issues.
- To promote gender balance in admission of undergraduate and graduate students.

3.2.7 Laboratory Services

Objectives:

- To establish a new petroleum specialized Lab.
- To improve on the organization and management of the laboratories within the Department.
- To equip the Department's laboratories with state of the art facilities in order to offer quality teaching, learning and specialized research.
- To accredit the Departmental laboratories internationally in order to offer referral outreach services.
- To maintain gender balance in recruiting laboratory staff.
- To comply with national and international laboratory rules and regulations.

Indicators

- ISO certification
- Number of staff trained
- Number of laboratories established and equipped
- Number of female technicians recruited

3.2.8 Staff and Students Support Services

Objectives

- Continue to improve students' welfare in areas of career guidance.
- Encourage / improve staff student/ relations.
- To enhance the awareness of University policies

Performance Indicators

- Number of career guidance workshops organized.
- Number of social activities organized for staff and students e.g. football, netball, volleyball, etc.

3.2.9 National, Regional and Internationalization

Objectives:

- Continue to integrate the international perspective into the Department's teaching, learning, research and outreach functions

- To continue attracting international students in the Department's programmes
- To keep encouraging staff and student exchange visits to regional and international Universities
- To keep encouraging academic staff to apply for jobs/positions in international bodies
- To continue encouraging members to apply for membership in professional bodies
- Continue to initiate regional and international teaching, learning, research and service delivery linkages.
- Increased organization and participation in international conferences and workshops
- Continued attraction of international students to our programmes.

Performance Indicators

- Number of staff/students internal and regional linkages established
- Number of International students admitted into the department
- Number of regional/international conferences organized and attended
- Number of collaborative projects

SWOT Analysis

INTERNATIONAL

Strengths:

- Establishment for academic staff at 87%
- Dedicated staff with women at 40%
- Good reputation as envisaged from the performance of the graduates on job market
- Good laboratory facilities
- Good research output
- Good relationship with stakeholders
- Good staff to student ratio
- Forty six percent (46%) of the academic staff have PhD.
- Linkages with foreign Universities.
- Participation in regional and international research projects
- Two E-learning laboratories in the department
- Installation of more ICT data points in the Department.

Weaknesses

- Inadequate funding, thus poor maintenance of facilities

- Bureaucracy at the Centre
- Inadequate ICT facilities and others for teaching, learning and research
- Poor marketing of geology and petroleum programmes
- Frequent strikes
- Unaffordable fees for private students

EXTERNAL

Opportunities

- Geology and petroleum play an important role in economic development
- Discovery of oil in the Albertine graben and impending production of this resource
- Continuing restructuring of the Ministry of Energy and Mineral Development and other related bodies.
- Government policy to promote and sponsor science education with geoscience disciplines among the priority disciplines
- Critical mass education for Universal Primary Education (UPE) and Universal Secondary Education (USE)
- Increased trend of collaboration linkage with North Universities

Threats

- Few students still offering Science in Secondary School
- Low investment in Science in Secondary Schools and University
- Government not committing funds for research thus affecting staff research and graduate programmes
- Science and Geology in particular not being appreciated by Society
- High unit cost for training Science Graduates
- Notion that Geology is a hard subject
- Opening up of more public Universities thus rendering competition for the meagre funds from Government
- Low GDP per capita affecting Universities operations
- High taxation on scientific equipment and consumables
- Limited job slots for Geology and Petroleum Graduates.