

## Message from the Chairman of the Department- EBE

The global challenges that are characterized by: climatic change, shrinking biodiversity, increasing rural and urban wastes, air and water pollution and accelerated consumption of non renewable resources require complex but sustainable solutions that are technically feasible, economically viable, environmentally responsible and socially acceptable. These challenges require approaches that will integrate multiple sources and numerous impacts to impart on land, water and air resources in an interaction that produces food and supports life on the planet in a sustainable manner. As Kenya and the region tackles the challenges of food security, gender empowerment, environmental protection, industrial development and globalization, the traditional role of engineers that involves single pass approaches to solve problems using resources that produce waste is changing to that of “Environmental and Biosystems Engineering” approach that employs the basic science of biology, mathematics, physics and chemistry as well as engineering sciences and designs to enhance the well being of animals, plants and the biosphere.

The Environmental and Biosystems Engineering (EBE) programme is dynamic and goes beyond the traditional approach of seeking immediate solutions to problems to one of interactive devolution of problems to recognize sustainable and environmentally sound solutions that minimize waste and continually recycle, reduce and reuse materials. The scope of Environmental and Biosystems Engineering is broader and encompasses Agriculture, Environment, Food, Forestry, Aquaculture, Amenity; Biology based production and processing industries and rural development. The role of the engineer both as a manager and entrepreneur is highly embraced. We highly recognize and appreciate the pertinent role the Engineers Registration Board (ERB) of Kenya plays in molding the graduate engineers to become professional engineers with high levels of interaction, integrity and respect in the Society that they serve.

Environmental and Biosystems Engineering programme prepares its graduates for careers requiring application of physical, biological, engineering sciences and designs to problems that involve environment and living systems. The graduates are trained to solve problems involving engineering aspects of Agricultural production, Biomaterials handling and processing for food and non food products and environmental resources management. The EBE graduates are getting employment in

**Government Ministries:** Water and irrigation, Agriculture, Lands and Settlement, Environment among others. **Parastatals:** Universities of Nairobi, Egerton, JKUAT, Moi, KU, Cereals board, Sugar Industry, National Irrigation Boards, Tea Board, Coffee Board, Lake Basin Development Authority.

**Private Companies:** Davis & Shirliff, Rift Valley Machinery, Firestone, Delmonte, Brooke Bond, Banks. **Consultancy Firms:** GIBB East Africa, LOG Associates among others.

**International agencies:** ICRAF, RELMA, UNDP, UN, UNEP, World Vision, Care Kenya.

**City and Town Councils:** Nairobi City Council and **Individual Entrepreneurships.**

So far more than 550 graduates and 105 masters' students and 6 PhD students have graduated from the Department. It is our hope that the graduates continue making an impact to the societies that they interact with the World over.

**Eng. Prof. Ayub N. Gitau**

Chairman of the Department (From July 2011 to date)

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