



FUTA NEWS

FUTA DON DEVELOPS DEVICE FOR STUDY OF SOILS, GIVES RECIPE FOR SUSTAINABLE AGRICULTURE

Knowledge of soil dynamics in tillage and traction is important in developing agricultural and mechanized equipment for crop production. This will enhance soil productivity for maximum yield that will guarantee food security in sub Saharan Africa and Nigeria in particular. This was the submission of Professor Seth Manuwa while delivering the 93rd inaugural lecture of the Federal University of Technology Akure. Speaking on the topic: Agricultural Engineering: Corability and Potency for Sustainable food security and National Development, Professor Manuwa said it is important to study the nature of soil and its properties in order to cultivate soil sustainability. Manuwa disclosed that the department of Agriculture and Environmental Engineering of FUTA under his supervision has developed device for this area of study. He said the soil bin facility for soil and tillage dynamics for both indoor and outdoor research is the first of its kind in universities and research institutes. He added that apart from physical, chemical and physiochemical properties are germane in studying the characteristics and behaviour of soil under the action of external forces like machinery and other earth moving equipment as developing nations who have neglected this area of knowledge and its applicability have been diminished and degraded agriculturally.

Manuwa urged the government to encourage and support activities that will promote indigenous design and development of agricultural machines to suit different agro climatic conditions and farmers in the country and establish village workshops for blacksmiths, tinsmiths and carpenters to produce or modify

existing small agricultural equipment that will enhance farming operations. The lecturer said manufacturing industries are necessary in order to mass produce at lower costs, products from such design and development efforts. He said Government should therefore encourage them to survive by providing enabling environment for their sustainability. This he said is a major road to providing lasting solutions to the problem of agricultural mechanization problems in Nigeria. Stressing the importance of agricultural mechanization, the professor of engineering said that it plays an increasingly important role in optimizing agricultural production. According to him it reduces drudgery, increases the safety and comfort of the working environment, enhances productivity, cropping intensity and sustainable agriculture. Making a case for Agricultural engineering, the lecturer said that it has the solution to the myriads of problems facing agricultural productivity in the world and Nigeria in particular for it is a recognized focus of engineering skills and innovation that takes a multidisciplinary approach to agricultural problems for labour saving, increased productivity and value addition, rural development and improved quality of life. Manuwa however warned that although engineering solutions make use of scientific principles, engineers must also take into account safety, efficiency, economy, reliability and constructability or ease of fabrication as well as the environment, ethical and legal considerations such as patent infringement or liability in case of failure of the solution. He advocated for collaborative research as the only way to make the desired progress in proffering solutions to the myriads of problems confronting agricultural productivity because nothing is achieved without adequate funding of research and development.

In his remarks at the, Chairman of the occasion and Vice Chancellor, Professor Joseph Fuwape represented by the Deputy Vice Chancellor, (academics) Professor Tunde Arayela commended the lecturer on the cerebral delivery of the lecture. He described the lecturer as an erudite professor who has contributed immensely to research and academic development in his field of specialization. The Vice Chancellor said Manuwa has demonstrated his intellectual prowess in his field and has been a consistently

productive scholar in addition to providing leadership both for his students and younger academics since he took up appointment in the University.