

INCEPTION WORKSHOP OF THE CREATES



Nelson Mandela African Institute of Science and Technology (NM-AIST) hosted the Inception Workshop of the African Centre for Research, Agricultural Advancement, Teaching Excellence and Sustainability (CREATES).

It is one of the African Centre of Excellence (ACE II) initiatives funded by the World Bank and it was attended by scientists and experts from world renowned higher learning and research institutions.

The Opening Ceremony for the Inception workshop was graced by the NM-AIST Vice Chancellor Prof Osmund Kaunde on the 6th of March, 2017. The high turnout of distinguished personalities at the function impressed the Vice Chancellor

Prof Kaunde informed the workshop delegates that CREATES five years project was aimed at strengthening the capacity of NM-AIST for the institution to serve as an African Centre of excellence for provision of Postgraduate training in Master's and PhD, applied research, and outreach programmes for Food and Nutritional Security in the Eastern and Southern Africa region.

He added that it is within the target of the NM-AIST to ensure that the five days' workshop comes up with concrete recommendations and conclusions which will assist

the project and the NM-AIST to attain its objectives by giving their insights through analysing the proposed programs which aimed to act as a change agent to the current problems of food and nutrition insecurities in Sub Saharan Africa.

Prof Kaunde urged the participants to assist the current and up upcoming Master's and PhD students by allowing them accessibility into the center's Laboratory facilities for them to be competitive and reliable to the continent of Africa and to the world.

After the introductory remarks the CREATES Centre Leader Prof. Hulda Swai explained to the workshop delegates that CREATES FNS was here to serve as a regional excellence hub in order to achieve and promote identified sustainable development goals on research based training.

Swai also said CREATES supports of excellent professionals and academia, E-learning platform to promote graduate teaching programmes, research activities and dissemination of information. She also mentioned that the Centre will facilitate acquiring a state of art core laboratory to support life science and related research fields.

Prof. Swai mentioned that CREATES will facilitate technological research output in good agricultural practice (GAP), food safety, nutrition and health by using bio-nanoscience and biorepositories for future research activities and that data repository will be the key component of the Centre in order to build capacity on predicting risks generated through climate variability and provide scenarios on climate mitigation and adaptation.

Prof Hulda Swai informed the delegates that prior to the inception workshop the CREATES team from NM-AIST worked together with other experts in the field of Science, Technology, Engineering and Mathematics (STEM) serving with Public and Private Higher Learning and Research Institutions from around the world convened for a four-day preparatory meeting from the 1st to the 4th of February 2017.

"They had reviewed, among others things; academic and research programmes offered by the CREATES FNS and they have successfully provided the direction in the strengthening of the capacity of NM-AIST for the institution to serve as an African Centre of Excellence."

Participants at the CREATES Inception Workshop hailing from both international and interdisciplinary group of experts had the opportunity to provide candid advice and guidance during the plenary and group discussions as well as in the frame of selected individual presentations. Some of the key recommendations were: the creation of market-led MSc and PhD academic and short courses; cross-cutting training approaches; hands-on and experiential research areas and effective ways of technology transfer, dissemination and adoption in communities, politics and the industry

Before and during the Inception workshop CREATES co-hosted two scientific Workshops including the one on Plant Metabolism for Improved Nutrition and Health organized by the Nelson Mandela African Institution of Science and Technology (NM-AIST), in association with the John Innes Centre (JIC), Biosciences eastern and the Central Africa - International Livestock Research Institute (BeCA-ILRI).



The *Plant Metabolism for Improved Nutrition and Health* was funded by UK's Biotechnology & Biological Sciences Research Council (BBSRC) and the CREATES.

The fortnight long Plant Metabolism for Improved Nutrition and Health workshop offered an opportunity for PhD and Masters Students from Tanzania, United Kingdom, Uganda, Kenya, United States of America, Ethiopia, Cameroon, Nigeria and Ghana to undergo different trainings and practical laboratory exercises on Extraction of Starch and Microscopy, Quantification of Starch (Megazyme Total Starch Kit), Total Starch Assay Procedure, Iron Microscopy, Phytic Acid (Phytate)/Total Phosphorus, Zinc Microscopy, Mass Spectrometry and Extraction, Quantification & Characterisation of Polyphenols.

Bio-diversity and Modelling short course also took place during the Inception workshop of the CREATES were Master's and PhD students from Tanzania, Kenya and Uganda attended. Facilitators of the training were from NM-AIST Tanzania, Hamburg university

of Applied Science & Hohenheim University both from Germany, Rhodes University from South Africa and University of Eldoret from Kenya.

During the aforementioned events, a number of Professors and Doctors were given an opportunity to present their current research areas to students in order to equip them with current trends and knowledge of their research.

CREATES also gave an opportunity to the workshop delegates to visit the farmers here in Arusha who are currently experiencing some farming challenges.

The newly formed “African Centre for Research, Agricultural Advancement, Teaching Excellence and Sustainability in Food and Nutritional Security” (CREATES-FNS) which is an African Center of Excellence (ACE), established at the NM-AIST through the World Bank’s African Centers of Excellence (ACE II) initiative.

The ACE II initiatives aims to build training and research capacity in the region by training and raising a critical mass of specialized and skilled human capital that can use a multidisciplinary approach to ensure sustainable environment, food and nutritional security in Sab-Saharan Africa.

CREATES-FNS program of NM-AIST aims at strengthening content, delivery, outputs and outreach for the MSc and PhD programs in Life Sciences and other related programs, with particular focus on core thematic areas of Sustainable Agriculture, Biodiversity, Ecosystem Conservation and Management, Food and Nutrition Sciences, and Health and Biomedical Sciences (these being the departments or pillars in School of life science), as a way to contribute to food and nutrition security in the region.

The 5 years’ program worth 6million USD will rely on the rich pool of adjunct professors and researchers from international, regional, and national collaborators in addition to NM-AIST faculty staff.