

**AFRICA CENTRE FOR RESEARCH, AGRICULTURAL
ADVANCEMENT, TEACHING EXCELLENCE AND SUSTAINABILITY
(CREATES)**

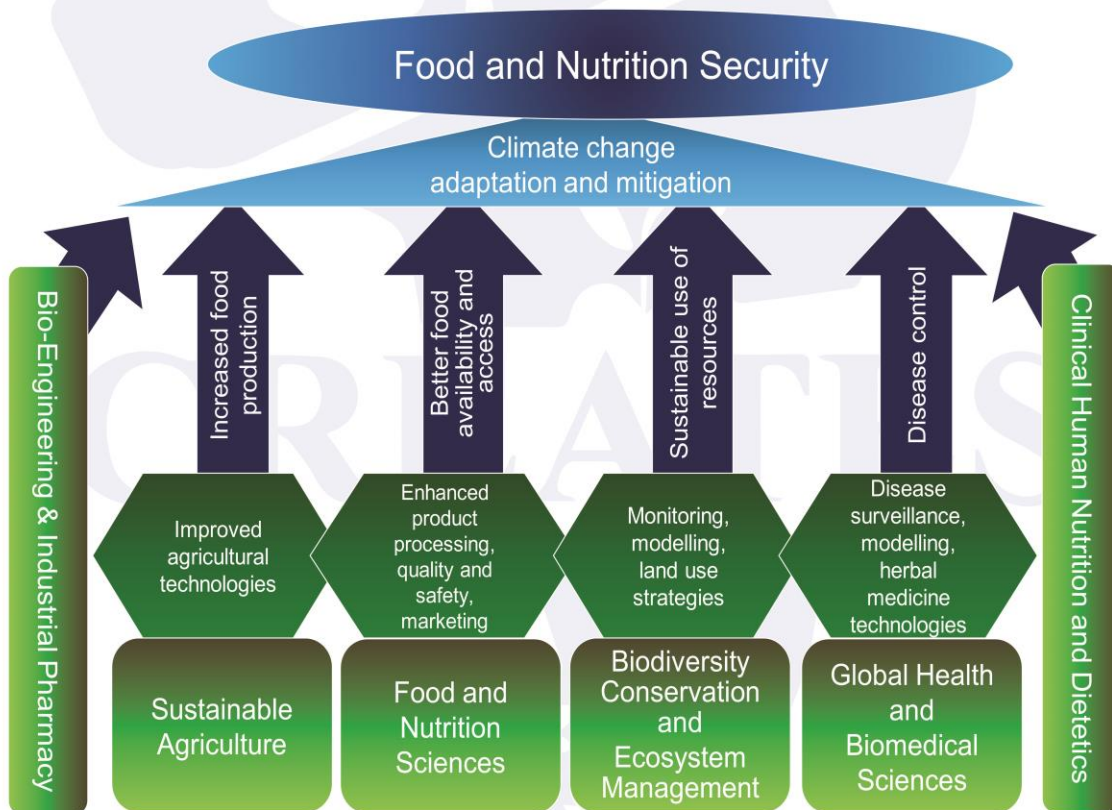


The Centre of Excellence (CREATES) funded by the World Bank, is hosted at the Nelson Mandela African Institution of Science and Technology (NM-AIST) in Arusha, Tanzania. The newly formed “African Centre for Research, agricultural Advancement, Teaching Excellence and Sustainability” (CREATES) in Food and Nutritional Security is an African Center of Excellence (ACE), which was established at the NM-AIST on January, 2017 through the World Bank’s African Centers of Excellence (ACE II) initiative. The ACE II initiative aims at building 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 a sustainable environment, food and nutritional security. The CREATES center which is under the school of Life Science and Biomedical Engineering (LiSBE) is a 5 years Programme worth US\$ 6 Million.

The CREATES provides a buzzing atmosphere of international and interdisciplinary research and education activities, novel technologies and private-public partnerships with the industry and the community at large as well as hands-on learning experience and evidence-based problem solving projects. CREATES encompasses novel curricula approaches, cutting-edge research facilities and highly skilled national, regional and international partners in various fields related to Life Sciences. CREATES encompasses six main Pillars namely:-

CREATES PILLARS

CREATES is anchored on the Six Pillars of the School of Life Science and Bioengineering (LiSBE) at NM-AIST



The **overall objective** of the CREATES is to strengthen the capacity of NM-AIST to serve as an African Centre of Excellence for provision of post graduate training (Master's and PhD), applied research and outreach programs for Food and Nutrition Security in the Eastern and Southern Africa region.

Specific objectives: Specifically the project seeks to strengthen the NM-AIST to become a magnet environment that provides innovative opportunities and state-of the-art learning environments for graduate students (PhD and MSc) as well as for faculty and other relevant stakeholders in the area of Food and Nutrition Security. This will enable NM-AIST produce high quality evidence-based research products, technologies and services with respect to agriculture, biodiversity, health and nutrition.

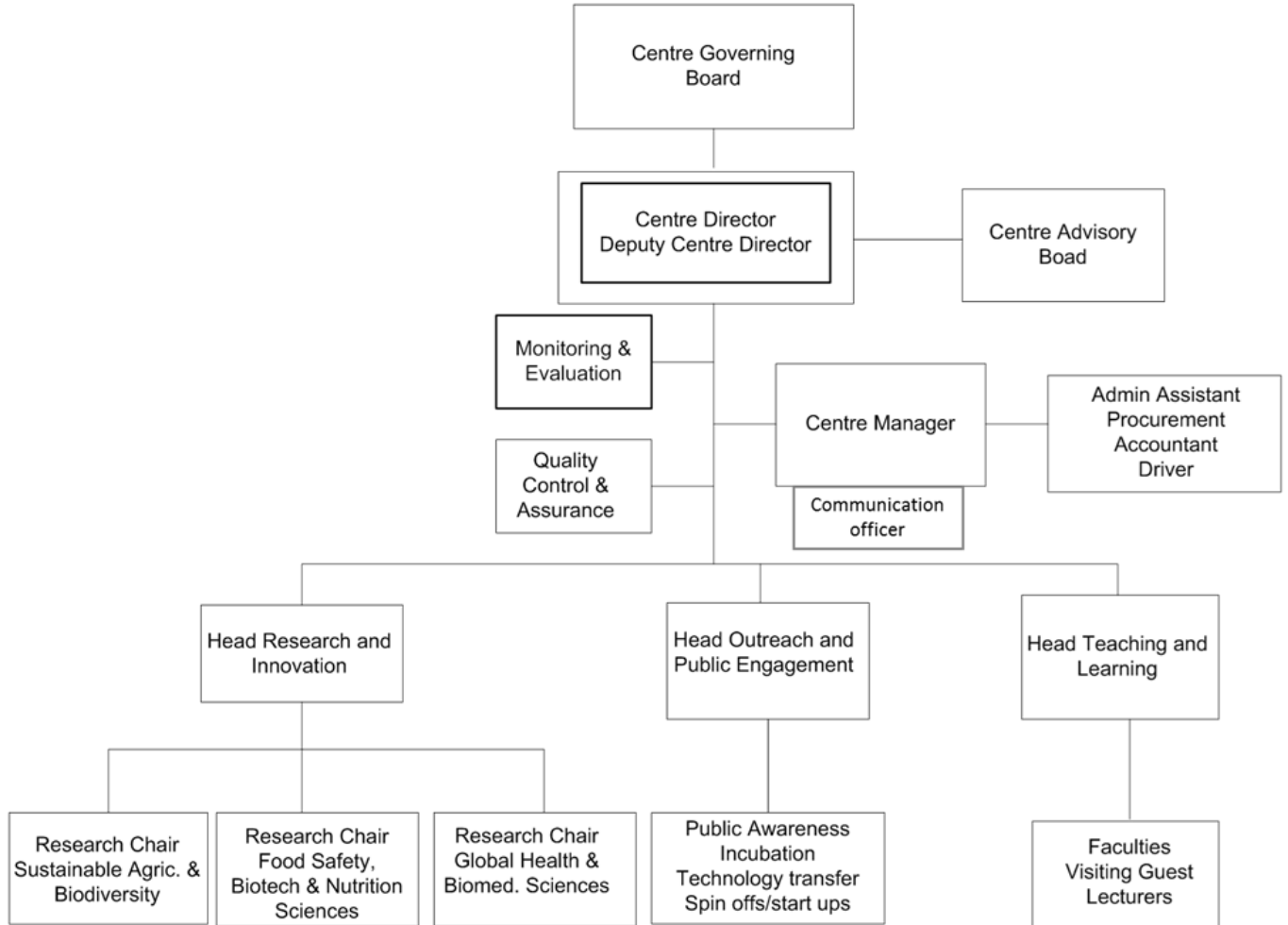
The Centre provides **innovative research, training, and outreach programmes in the region**, taking advantage of the strong existing international and regional collaboration activities in the Nelson Mandela African Institute of Science and Technology (NM-AIST).

Methodology

CREATES serves as a regional excellence hub to achieve and promote specific Sustainable Development Goals under the following aspects

- Research based training and support of excellent professionals and academia;
- E-learning platform to promote graduate teaching programmes, research activities, and dissemination of information;
- State-of-art core laboratory to support Life Science and related research fields;
- Technological research output in good agricultural practice (GAP), food safety, nutrition and health using bio-nanoscience and bio-repositories for future research activities; and
- Data repository to build capacity on predicting risks generated through climate variability and to provide scenarios on climate mitigation and adaptation

Centre Governance



CREATES Research areas under the NM-AIST School of Life Science and Bio-Engineering (LiSBE)

Pillars	Sustainable Agriculture	Food and Nutrition Science		Biodiversity Conservation and Ecosystem Management		Global Health and Biomedical Science	
Main Research Themes	Sustainable Agriculture	Human Nutrition and Dietetics	Food Science and Technology	Sustainable Use of Natural Resources	Biodiversity Conservation	Emerging and Re-emerging Health Threats	Pathogen Surveillance Preparedness and Response
Sub-Research Themes	Plant Molecular Breeding for Managing Biotic and Abiotic Stress	Clinical Nutrition	Agro-Processing and Postharvest Losses Management	-Rangeland Science and Management	Molecular Biodiversity and Bio-Prospecting	Human and Animal Infectious Diseases	Diseases Modelling and Predictions
	Sustainable Management of Tropical Agriculture Production Systems	Dietetics	Food Safety	Rangeland Science and Management	Molecular Biodiversity and Bio Prospecting	Human and Animal Infectious	Vaccinology
	Pest Diagnostic and Management in Agriculture	Community Nutrition	Functional Food for Health	Land use Scenarios under Climate Change	Invasive Species Management	Zoonoses	Herbal Products and Pharmaceuticals
	Agro-ecology			Human Wildlife Co-existence	Community Based Conservation	Non Communicable Diseases	Diagnostics
	Seed borne Pathogens					Antimicrobial Resistance (AMR)	Risk Assessment and Management
	Molecular Plant Pathology						

SOME OF THE EVENTS CONDUCTED BY THE CREATES



**CREATES Needs assessment Workshop
1st – 4th March, 2017**



**CREATES Inception Workshop
6th – 11th March, 2017**



**CREATES conducted International short course on Plant Metabolism for Improved Nutrition and Health
12th February to 4th March, 2017**



On 11th February, 2018 the CREATES in partnership with the World Bank Tanzania County Office conducted Industrial Partners Meeting in Dar es salaam.



The CREATES through NM-AIST signed a letter of agreement for exchange programmes of students and Faculty with Hunan University of Technology of China (HUT)



On 21st of February, 2018 the CREATES through NM-AIST signed an MoU with the Southern Agricultural Growth Corridor of Tanzania (SAGCOT) Catalytic Trust Fund (CTF) to support Mobile Agricultural and Rural Development Applications for the purpose of Supporting Farming-As-A-Business (FAAB) in Tanzania

Project outcome

The CREATES aims to become a regional hub for innovative solution in Food and Nutritional Security through educating MSc and PhD graduates who are innovative and empowered enough to be job creators and not job seekers. The outcome of the initiative includes critical mass of high capacity education staff, new technologies, spin off products and patents, transparency and access to knowledge, Strong linkage with Industries, Regional excellence in academic programme and Bio repository and high-impact real life projects. Therefore, the outcome will be realised through partnerships with industry, international, regional, national, stakeholder-oriented, academic, communities, and private public partnership.

Contact Information

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