Executive Summary

Preamble

We the participants, in the Tanzania Higher Education Summit on Enhancing the Contribution of Higher Education in the Industrialization Process of Tanzania, gathered in Dar es Salaam on 21st -22nd November, 2016 confirm our commitment to the objective of developing strategies that will enable the Tanzania Higher Education Sub-sector to produce competent graduates and research outputs which will significantly contribute to the process of industrialization in Tanzania.

Organizers of the Summit

The summit was organized by: The Committee of Vice Chancellors, Principals, and Provosts of Tanzania (CVCPT), the Tanzania Commission for Universities (TCU), the Ministry of Education Science and Technology (MOET) and the Trust Africa.

Objectives of the Summit

The aim of the summit is to develop strategies that will enable the Tanzania Higher Education Sub-Sector to produce competent graduates and research outputs which will significantly contribute to the process of industrialization in Tanzania. Specific Objectives include:

- i) To highlight the role of higher education in the industrialization process of Tanzania.
- ii) To propose strategies for higher education to be able to produce outputs that will catalyze the process of industrialization through identified key economic sectors.
- iii) To propose effective funding and governance models of higher education institutions in Tanzania for accelerated industrialization.

Noting that:

The efforts, commitment and determination of the fifth phase of the Government of the United Republic of Tanzania to build an industry based economy and ensuring that Tanzania realizes its long-standing ambition of becoming a middle income country as stipulated in the Tanzania Vision 2015.

The recently published National Five-Year Development Plan 2016/17 to 2020/21 has prioritized Industrialization for Economic Transformation and Human Development for the next five years.

For the nation to effectively implement the identified objectives under the second Five Year Development Plan it will require to have competent human resource and credible research outputs from our higher education system.

Vision

We unanimously affirm that:

- i) Human Capital is the necessary catalystand most important factor in achieving sustainable industrial development.
- ii) There is a need to re-think the role of Higher Education Institutions to re-align their systems and take the drivers' seat in the development of human capacities for the sustainable industrialization of Tanzania through academic and research as well as to promote innovation for industrialization and economic development.

Guiding Principles

We agreed to be guided by the following principles:

- 1. Provision of high quality and relevant higher education.
- 2. Promotion of research and innovation
- 3. Strengthening inter-sectoral linkages and value chains
- 4. Enhancement of meaningful academia-public-private engagement
- 5. Strengthening and diversifying sources of sustainable funding for higher education

Priority Areas

We unanimously agree to focus on the following as our priority areas:

- 1. Coordination of strategic planning at system level to define the role of Higher Education Institutions (HEIs) in the industrialization of Tanzania.
- 2. Preparation of an implementation strategy for industrialization and articulation of the role of each institution.
- 3. Ensure quality and relevance in developing the requisite human capital for all sectors of the economy by:
 - Using the available data to map human resource and skills requirements for strategic industries needed for national development and develop training programmes to fill the gaps;
 - ii) Conducting tracer studies; and
 - iii) Benchmarking and review of curriculum after every 5 years through engagement with industry.
- 4. Improve research and training in all sectors by introducing internship and incubation programmes as an integral part of university research and training.
- 5. Diversify sources of funding to become financially sustainable

Declaration and Action Plan

Priority Areas

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Coordination of strategic planning at system level to define the role Higher Education Institutions (HEI's) in the industrialization of Tanzania

Action Plan

- 1.1 Achieving through commitment of government and other higher education stakeholders and private sector, a revised Higher Education Policy that appreciates the role of Universities in producing quality graduates with necessary knowledge and skills to support the industrialization process of Tanzania by 2020. Currently the Higher Education Policies seem to lack proper intentions for supporting the industrialization process.
- 1.2 Aiming to get the private sector involved and appreciated in higher education's strategic planning to the average of 10% universities budgets by 2030. Currently the private sector including investors in the industrial sector seems to be isolated in higher education strategic planning despite being one of the main employers of higher education graduates.
- 1.3 Identify and develop two universities that will specialize at training innovative industrial experts by 2030. Currently there is no universities in Tanzania that are specifically focused on training innovative industrial experts
- 1.4 Aim to promote cooperation between
 Universities and industrial development
 agencies such as Tanzania Industrial Research
 Development Organization (TIRDO), and Small
 Industries Development Organization (SIDO)
 by organizing at least two workshops per year
 starting 2018. Currently there is no clear link
 between Universities and industrial
 development agencies in Tanzania.

Preparation of an implementation strategy for industrialization and articulation of the role of each institution

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Ensure quality and relevance in developing the requisite human capital for all sectors of the economy

- 2.1. A team comprising of Higher Education
 Stakeholders and Policy makers to be
 formed and given the task of preparing an
 implementation strategy for
 industrialization articulation of the role of
 each institution by September 2017.
- 2.2 A team to finish the preparation of an implementation strategy by December 2017
- 2.3 Institutions to discuss the implementation strategy and agree on a final draft by February 2017.
- 2.4 Institutions to prepare their own action plans in line with the National Strategy for Industrialization and articulate their roles accordingly by March 2018.
 - 3.1 Using available data to map human resources and skills requirements for strategic industries needed for national development and develop training programmes to fill the gaps and produce a report by December 2017.
 - 3.2 Conducting tracer studies involving industrial experts to identify specific human resource qualities and skills necessary for industrial development process in Tanzania and produce full report by March 2018.
 - 3.3 All institutions to share a common curriculum for development of human capital with specific skills and knowledge necessary to support the industrialization process in Tanzania by 2020.
 - 3.4 Benchmarking and review of curriculum after every five years through engagement with industry starting 2025
 - 3.5 Produce qualified Human Resources for all sectors (such as Health and Education), and of appropriate mix enabling them to provide needed services in the country by 2025.
 - 3.6 Identify gaps in Human Resources'
 Knowledge, Skills and Abilities to help HEIs contribute to their elimination

Improve research and training in all sectors by introducing internship and incubation programs as integral part of university research and training

- 4.1 The following actions need to be taken by higher learning Institutions:
 - Review curriculum to include industrial internship as part of learning process for all programs with direct link to industrialization process starting June 2018.
 - Review examination policies and regulations to include internships as part of cumulative units in grading system by June 2018.
 - Solicit partners/donors (internal and external) to support initiation of at least 2 incubation programs in 10 universities that support the industrialization process in Tanzania by 2020.
 - Increase the number of academic staff with industrial experience of at least five year to the ratio of 30% in order to enhance practicality in learning process by 2025.
 - Ensure that there is good governance in HEIs.
 - 4.1 The following actions need to be taken by the Private Sector in Tanzania.
 - To increase the financial support of incubation programs in university program in Higher Learning Institutions as part of Corporate Social Responsibility (CSR) to 40% of their CSR budget by 2025.
 - To support practical learning through offering at least 4 free training per year by senior industrial experts starting January 2018.
 - Support internship programs by accepting a total of at least 1000 interns per year from Higher Learning Institutions while providing interns with maximum cooperation as required starting from August 2018.

Diversify sources of funding to support sustainable higher education training for enhanced industrialization in Tanzania.

- 5.1 The following actions need to be enhanced by Higher learning institutions in order to ensure sustainability of their training programs aimed at enhancing industrialization process in Tanzania:
 - Review financing systems to determine the extent of income generated from available sources and their sustainability by December 2018.
 - Consider unexplored sources of financing in higher learning institutions and reach 20% of non academic sources of funding by 2025.
 - Invest in non curricular universities activities such as research, consultancy etc starting July 2017.
 - Mobilize funds (grants, donations etc) specifically for training industrial experts starting July 2017.
- 5.2The following actions need to be fostered and enhanced by the Ministry of Education,
 Science and Technology, in order to ensure sustainability of Higher Institutions' programs aimed at enhancing industrialization process in Tanzania:
 - Assist higher learning institutions in mobilizing funds for sustainable training of industrial experts starting August 2017.
 - Creating enabling environment for sustainable financing of higher learning institutions by advocating for tax reliefs in higher education equipments starting August 2017.
 - Seek and adopt adequate, predictable and sustainable financing mechanisms for universities by judicious implementation of recommendations contained in a 1998 Tanzania government report on Sustainable Financing of Higher Education in Tanzania by June 2018.

Higher Education Institutions to offer effective training and research for earth resource-based industrialization to ensure sustainable development in the country

- 6.1 In order to accelerate development of earth resources-based industrialization while ensuring its sustainability, HEIs should do the following:
- (i). Offer at least 4 training per year and research in basic geological, geophysical and geochemical surveys (including remote sensing, ground mapping and sample analysis in the laboratory) for identification and characterization of existing geological environments in the country and to specify positions that are potential for hosting earth resources starting November 2017.
- (ii). Offer training and research to impart better understanding and execution of prospecting and detailed exploration programs to establish the exact quantities and qualities of the available resources in Tanzania starting November 2017.
- (iii).Train and research for enabling effective and efficient Economic Evaluation of earth resources development and utilization Projects starting November 2017.
- (iv) Offer training and research programs geared towards ensuring efficient and effective Mine Development Plans and that ensure efficient implementation of the resources extraction program from the ground (Mining) starting November 2017.
- (v) Conduct training and research for increasing efficiency in mineral Beneficiation (Processing) programs starting November 2017.
- (vi).Offer training and research for enhancement of value addition (Smelting and production of alloys for metals and cutting, polishing and jewelry for gemstones) programs in the country to minimize exportation of earth resources in raw or semi-processed form starting November 2017

- (a) Higher Education Institutions and the Government commit to use tourism value chains and strategies for inclusive tourism development as means for nurturing industrial development in the country
- (b) Tourism Division, Ministry of Natural Resource, Higher Education Institutions, Tanzania Tourist Board, National Park Authority, and Ministry of Transport and Communication, etc should increase their commitment in addressing the gaps in the legal and institutional frameworks for preventing unauthorized third parties from benefiting from Tanzania rights

- 7.1 In order to accelerate development of the tourism sector and effect industrialization through tourism, while ensuring its sustainability, HEIs and the government should do the following:
- Promote and support strategic industries in the regions and zones with high concentration of inputs or raw materials in order to utilize well the available resources in production starting January 2018.
- ii. Support agro processing facilities in the horticultural identified zones (Northern Zone Arusha, Kilimanjaro, Manyara and Tanga) and (the Southern Zone Morogoro, Iringa and Mbeya regions) to minimize waste resulting from perishable goods.
- iii. Facilitate upgrading and updating of standards (e.g., health, safety, quality) by farmers, processors and traders in order to build competencies and increase competitive edge within local and international markets.
- iv. Enforce the National Tourism Curricula: enhance exchange programmes, pairing with reputable training institutions offering programmes in hospitality and tourism and collaborate with the private sector to ensure acquisition of necessary skills required in the tourism industry.
- v. Review the National Tourism Policy of 1999, Strategic Plan of 2002, and Tourism Act of 2008, and prepare a National Tourism Development Strategy and National Museum Policy by 2018.
- vi. Develop and commercialize intellectual property rights (e.g., trade or service marks and geographical indications) in tourism and hospitality sector to prevent the illegal uses of the Tanzanian properties elsewhere by 2019.
- vii. Renovate airline connections and airport facilities, and improve quality and level of service electricity, water supply, sewage systems, healthy services, internet connectivity, ATM machines by 2022.

- (a) Higher Education Institutions should address immediately gaps in training and research in particular gaps identified in the Agricultural Sector in the Country
- (b) Higher Education Institutions and the government to establish strong linkages between research budget and policy direction of the country

- 8.1 In order to accelerate development of agricultural sector and its related sub-sectors, and in order to ensure its sustainability, HEIs should do the following:
- (i). Embrace innovative delivery approaches in universities starting September 2017. For example, the use of team academy model where a network of learning community is created with a specific aim of developing young adults skills, knowledge and personal qualities required to run their own businesses.
- (ii). The government and Higher Education Institutions should institute initiatives and programmes which are aimed at changing young adults' mentality from the colonial mentality of preparing job seekers to preparing job creators by 2020.
- (iii). Review and change academic promotion criteria in HEIs to include accumulation of points accrued through relevant community services and publications which have evidence of community and livelihood transformation starting 2020. e.g., evidence of the researcher's contribution to revenue or income in a farming community.
- (iv) HEIs and government to start training specific researchers for specific agricultural crops in order to create a pool of professionals who can be problem solvers in ensuring that there is sustainable pool of experts in every specific sub-sector in the agricultural sector starting 2018.