

# ISSUES OF HIGHER EDUCATION IN TANZANIA

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## 1. INTRODUCTION:

Having realised that human capital, more so one which is educated and healthy is central to socio-economic development; the Government of the United Republic of Tanzania established the Ministry of Science, Technology and Higher Education (currently known as the Ministry of Higher Education, Science and Technology) in November, 1990 with the sole responsibility of coordinating and overseeing policies of Higher Education, Technical Education, Science and Technology.

Given the above responsibility the ministry has come up with its vision and mission as follows:

### ▪ VISION:

The Ministry's vision is to have a Tanzanian Society that will be competitive, knowledgeable, scientific and technologically anchored among the community of Nations by 2025.

### ▪ MISSION:

The mission of the Ministry is to facilitate the generation of human capital for wealth creation through policy development, implementation and monitoring the provision of higher and technical education, research and consultancy and the promotion of application of Science and Technology.

## 2. BACKGROUND

In a period of forty six years since independence, the education system in Tanzania has grown from only one institution of higher education (a University College) in 1961 to more than 200 tertiary training institutions by December 2006. The massification of these tertiary institutions catering basically for Ministries and

Parastatals is a manifestation of increasing demands for personnel with higher education background from both the public and private sectors.

Following the establishment of the Ministry of Science, Technology and Higher Education in November, 1990 there has been further developments in the higher education sector whereby by 1990:

- (i) There were only two public Universities, the University of Dar es Salaam with Muhimbili University College of Health Sciences as its constituent College and the Sokoine University of Agriculture in Morogoro, and
- (ii) There was only one Technical School, the Dar es Salaam Technical College,
- (iii) The total student population in all the institutions was less than 5000
- (iv) There was no private higher learning institution.

However, by December, 2006 the situation was as follows:

(i)	Number of Public Universities and University Colleges	=
	11	
(ii)	Number of Private Universities and University colleges	
	= 19	
	<b>Total = 30</b>	

(iii) No. of students in both Public and Private

Universities	= <b>52,831</b>
Students in Public Universities	= 35,821
Students in Private Universities	= 5,275
Students in other Tertiary	
Institutions	= 11,735

Of the other tertiary institutions, there are five Technical Colleges (including one private one) with a total student population of 2,200.

### 3. **The role of Higher Education in National Development:**

In an attempt to address development challenges, Tanzania came up with its **“Development Vision 2025”** which among other things envisages “a well-educated and learning society.” Under the vision it is our determination to be a nation with high quality education at all levels; a nation that produces the quantity and quality of educated people sufficiently equipped with the requisite knowledge and skills to solve the society’s problems, to meet the challenges of development and to attain competitiveness at regional and global levels. This is considered critical after realising that the quality of our workforce is a serious constraint to our development efforts. Thus, education including the application of information and communication technology (ICT) shall continue to rank high in our efforts to ensure sustainable development.

It is unfortunate that the many Declarations and agreements made by the global and regional bodies such as the United Nations Millennium Declaration (2000) and its eight Millennium Development Goals and the New Partnership For African’s Development report (2005); ***Higher Education and its potential contribution to national development are not mentioned directly.*** On the other hand, the African action Plan (2005) and the Report of the Commission for Africa start to mention higher education more specifically. While stressing the importance of quality primary and secondary education, they acknowledge the important role the higher education sector can play in enhancing socio-economic development in Africa.

The African Action Plan report lays an emphasis on developing research and higher education capacity as well as information and communication technologies (ICTs). The commission for Africa report identifies four priorities in the sector including professional skills, physical infrastructure, human resources and research capacity. It is apparent from the main international declarations and agreements on development in Africa that the approach has been to address issues such as debt

relief, trade, infrastructure development, good governance etc without considering the need to have skilled/professional human capital capacity in place.

4. **Mr Chairman, and conference participants,**

Until the middle of the 1990<sup>s</sup> most education development projects focused on primary and secondary education claiming to have better rate of return (World Bank 1980<sup>s</sup>)and playing a key role in poverty reduction (World Bank, 2004). Most development partners regarded universities as white elephants (institutional enclaves) without direct participation in the development process of the African Communities. Very unfortunately this view was nurtured by the World Bank for many years.

5. **Mr. Chairman and Conference participants,**

I am delighted to note the shift in paradigm of the World Bank as evidenced by its collaboration with the “Joint Japan - World Bank Graduate Scholarship Programme (JJ/WBGSP)” and its report in constructing knowledge societies entitled “New Challenges for Tertiary Education, World Bank Publication 2002” which do acknowledge the role of higher education as the engine of development in the new knowledge economy whereby the new modes of economic growth are dependant on knowledge and information technology.

The World Bank over report (2002) concludes with its commitment to assist its client countries in drawing an international experience and mobilising the resources needed to improve the effectiveness and responsiveness of their tertiary education system (Quick win project).

Needless to emphasise the fact that no country can develop and be competitive when the workforce of its civil service and parastatal organisations is dominated by primary and secondary school leavers?!

**6. Mr. Chairman and Conference participants,**

Universities and other higher learning institutions are key players in indigenising knowledge and diffusing it into the national economy. As frontiers of knowledge and technology rapidly advance and competition between industrial firms and nations becomes fierce, industries have tended to turn to higher learning institutions such as universities for assistance to keep abreast with the frontiers of knowledge.

The four major functions of a university are as follows:

- To transmit advanced knowledge from one generation to the next so that it can serve either as a basis of action, or a springboard to further research;
- To provide a centre for the attempt to advance the frontiers of knowledge through research,
- To serve the society through community service, and
- To provide through its teaching for the high level manpower needs of the society.

A university, whether of science and technology or otherwise, is thus characterized by its ability to advance knowledge and search for new frontiers of knowledge. University training imparts knowledge and understanding of methods, principles and concepts, and emphasizes research, including basic research and scientific thinking. The University being the collector, distiller, repository and dispenser of knowledge is an important partner to the government in applying this knowledge to the objective analysis of the national challenges in terms of policies, governance, socio-economic development, sustainable growth, prioritization and sequencing of development actions; and providing objective prescription and predictions.

**7 Mr. Chairman and Conference participants,**

The Key Issues of University and Higher education in Tanzania largely revolve around the following:

- (i) Financing Higher Education,
- (ii) Expansion and accessibility,

- (iii) Quality assurance and relevance,
- (iv) Information and Communication Technology (ICT)
- (v) Building a skilled human capital, and
- (vi) Research.

#### 7.1 **Financing and Affordability**

The funding of public universities and other higher learning institutions largely depends on Government subvention which in most cases is inadequate. Thus the financing and affordability of higher education is currently a top public debate agenda in Tanzania. The problem seems to stem from the fact that education was free in Tanzania before the late 1980s. However, with the increase of population and number of students completing advanced secondary education, it become a burden for the government to provide free quality education, and hence the introduction of cost-sharing. It is apparent that the cost cannot be borne by many parents because of poverty. However with the emergency of private universities; well to do parents have demonstrated willingness to pay for university education of their children. This is also true for the students in public universities under private sponsorship. This has caused debate and complaints from the public on grounds that it is only the children from the well to do families who can have access to university, and higher education thereby leaving the best brains from poor families.

In 2004 the Government enacted a law to establish the Higher Education Students Loan Board (HESLB) (URT Act No.9, 2004) to manage a students' loan scheme, primarily to facilitate access to higher education by students whose parents cannot afford to pay for them. Under the scheme all university students, including those from the private universities are eligible for loan. However, given the small size of the fund, loans are provided based on the applicants academic performance. This practice is also being debated with most arguing in favour of availing loans to all students who

qualify for higher education. But where will the money come from? In regard to this question, there are several proposals.

- One is the involvement of the private sector. It is argued that given appropriate incentives the private industry in Tanzania can make significant contribution to the financing of higher education. Higher learning institutions are challenged to play their cards well by creating conditions and mechanisms that will attract the private sector to do business with them.
- The other proposal is to borrow money from the World Bank and other development partners to jumpstart the implementation of an integrated Higher Education Programme, while the nation is developing and mobilizing local capabilities to gradually take over financing of the same.
- On the other hand, the government through the Tanzania Education Authority has been assisting the entire education system by improving their teaching and learning environments.

## **7.2 Expansion and Accessibility to Higher and Technical Education**

While there is a positive correlation between participation rates in Higher and Technical education and development; (Carnoy and Castells, 1993; Serageldin, 2000), higher and technical education participation rate in Tanzania of 1.3% of the age cohort is one of the lowest in the sub Saharan region where average participation rate is below 5% while that of the many high income countries is well over 60%. As stated earlier, the current total student population in higher and technical education institutes is 52,831 with the number of female students constituting 33%. The Government of the United Republic of Tanzania has been implementing the Primary Education Development Programme (PEDP, 2002-2007) and the Secondary education Development Programme (SEDP, 2004-2009) both of which have been successful in increasing students enrolments and outputs. The outcome of

the PEDP and SEDP is to provide a pool of students to join the Universities and other higher learning institutions in the country and thereby improving Tanzania's participation rate. The quality of the SEDP graduates will very much depend on the availability of up to date teaching and accommodation facilities including libraries, laboratories, teaching staff as well as staff housing and hostels for students.

**Gender equity** in higher and technical education is a serious constraint in Tanzania more so in science and technology related academic programmes. This is a result of the fact that the pool from which female students qualifying for science and engineering programmes is too small coupled with the misconception that science and engineering courses are masculine. However, with the introduction of a special pre-entry programme for female science students, the total undergraduate enrolment of female students has grown from 7.5% in 2003 to 23% in 2006.

Another compounding factor is the **decline of interest by the applicants for Science, Engineering and Technology courses**. Recent admission trends of the universities and other higher learning institutions have indicated that increasingly more candidates with science combinations opt to study commerce, law or other non science disciplines. There could be some basic reasons for this trend including some short term benefits evident from the current dominance of trade over direct science - based production system in the country. Another factor associated with the low recruitment level of undergraduate students into science and engineering courses include **erosion of mathematical skills**. There is thus an urgent need to redress the teaching of science and mathematics in Primary and Secondary Schools. Unless this trend is reversed, the "knowledge divide" between the developed and developing countries will even become greater. The developing countries including Tanzania ought to address this matter urgently so as to create a

critical mass of scientists in order to stimulate a rapid socio-economic development. The role of Science, Technology and Innovations (STI) is widely acknowledged in socio-economic development, thus the need for STI to be given highest priority in education system and resource allocation.

The Government of the United Republic of Tanzania in collaboration with its Development partners as well as Non-Governmental Organisation is determined to expand both the higher and technical education so as to address the Millennium development Goals.

### **7.3 Quality assurance and relevance**

It is quite apparent that currently there is a high social demand for higher education primarily because of the expected returns; and hence the current expansion of the tertiary education system. However, improving accessibility to higher and technical education must go in tandem with quality assurance for the education being provided for. There has been some feeling among members of the public that the quality of education, both at school and University levels is declining. The decline is in part attributable to laxity in the enforcement of the known quality control measures, and in part due to lack of a National Qualifications Framework (NQF).

In response to this, the Ministry of Higher Education, Science and Technology has established both the National Accreditation Council for Technical Education (NACTE - 1997) and the Universities Act No.7 (2005) establishing the Tanzania Commission for Universities for Coherent Management and quality assurance for the technical and University education respectively. Both the Tanzanian Commission for Universities and the National Council for Technical education and other relevant authorities will have to initiate the development of a National Qualifications Framework to guide the sector.

#### **7.4 Information and Communication Technology (ICT)**

The application of ICT in the institutions of higher learning has a strategic place in enhancing their operational efficiency and advancement. This ranges from distance learning delivery modes, connectivity between institutions, ministries and stakeholders and thus making the availability of ICT service much more cost-effective. ICT has become a key element in the way teachers teach and students learn. Currently, the level of ICT application in the education sector in the country is still inadequate with the whole tertiary and higher education sub sector facing a number of bottlenecks due to limitation of ICT infrastructure and specific competent workforce. The Ministry of Higher Education, Science and Technology, with the assistance of Development partners is to establish the Tanzania Education Network (TENET) which to a greater extent will enhance connectivity between institutions of higher learning, ministries and other stakeholders. It will be much more cost-effective.

#### **7.5 Building of Skilled human Capital**

This aspect has in part been addressed under the sub-topic of Expansion and Accessibility to Higher and Technical Education 7.2). However, the overall development objective in this area is to produce the quantity and quality of workforce with the necessary knowledge and skills to address the challenges of under development. We need to identify skills gaps and address them. Currently, Tanzania is facing challenges of acute shortages of well qualified workforce including teachers at all levels, doctors, Nurses, engineers, technicians etc. Apart from expanding the undergraduate enrolments, the Ministry also plans to start graduate programmes at the Universities of Dar es Salaam and Sokoine University of Agriculture so as to produce a cadre of

graduates with the necessary skills to man the key sectors of the economy including the mining industry, tourism and hotel management, industry, teaching at all levels but mostly in Universities and higher learning institutions, but also to produce a critical mass of human capital to meet the diverse needs of the National development goals as outlined by MKUKUTA

## **7.6 Research**

Research is one of the key mandates of Universities, the others being teaching and community service. The Science and Technology in use today is an outcome of long-term investment in Research and Development (R&D). Research which is a process of inquiry that seeks new information or verifies existing facts in order to solve problems within society, is equally an important tool and investment for socio- economic development of any country. While both basic and applied research is important; for a developing country like Tanzania, more resources ought to be directed to applied research since it does provide the required solutions within a short period of time. All the same, some allocation of resources to basic research is prudent as medium and long-term development strategy.

The Government contribution to Science and Technology research and training is still small with expenditure to Science and Technology (R&D) being 0.18% of the GDP compared to the minimum of 1% recommended. Tanzania was the second country in Africa after Ethiopia to develop a Science and Technology policy (1985) but implementation of its strategic plan has been more elusive due to resource constraints. Efforts are underway to review and develop a Science, Technology and Innovation (STI) systems policy so as to make Science and Technology much more visible to the ordinary Tanzanian.

**8. Mr. Chairman and conference participants,**

I have tried to elaborate some of the key issues related to Higher Education in Tanzania and I believe that other developing countries have a similar experience. At this juncture, I wish to appeal to the World Bank and other Development Partners to assist Tanzania to deal with these and other related issues so that Tanzania can achieve its medium and long term socio-economic development.

**=== I THANK YOU FOR YOUR ATTENTION===**