

The Republic of The Gambia
Ministry of Higher Education, Research, Science & Technology



**National Tertiary & Higher Education
Policy - 2014 - 2023**

CONTENTS

CONTENTS.....	I
ABBREVIATIONS	III
EXECUTIVE SUMMARY	V
1. INTRODUCTION.....	1
1.1. Background	1
(a) Vision	3
(b) Mission.....	3
(c) Goal.....	3
1.2 National Priorities	3
(a) Short Term	3
(b) Medium Term.....	4
(c) Long Term.....	4
1.3 Justification for the Policy	5
2. SITUATIONAL ANALYSIS	7
2.1 Access and Equity.....	7
2.2 Quality and Relevance	10
2.3 Research and Development.....	11
2.4 Science, Technology and Innovation	12
2.5 Sector Management.....	12
1. University Education and Research and Development.....	14
2. Professional Education and Training	15
3. Technical and Vocational Education and Training (TVET).....	16
4. Science, Technology and Innovation (STI)	16
5. Administration and Coordination of Tertiary and Higher Education	17
3. POLICY STATEMENTS AND OBJECTIVES.....	19
3.1 Guiding Sector and Institutional Governance	19
3.1.1 Accountability	19
3.1.2 Autonomy.....	20
3.2 Access and Equity	21
3.3 Quality and Relevance	23
3.4 Research and Development.....	25
3.5 Science, Technology and Innovation	27
3.6 Sector Management.....	27
4. POLICY IMPLEMENTATION STRATEGIES.....	31

4.1	Access and Equity	31
4.1.1	Expanding Access	31
4.1.2	Providing Affordable Tertiary and Higher Education	31
4.1.3	Gender and Equity.....	32
4.1.4	Facilitating Access	32
4.2	Quality and Relevance	32
4.2.1	National Qualifications Framework (NQF)	32
4.2.2	Quality of Teachers and Academic Staff	33
4.2.3	Improvement of Facilities	34
4.2.4	Relevant Programmes	34
4.3	Research and Development.....	34
4.3.1	Coordination and Management	34
4.3.2	Institutional Involvement in R&D	35
4.3.3	Making Research Relevant to the Needs of The Gambia	35
4.4	Science, Technology and Innovation	36
4.4.1	Short-Term Strategies	36
4.4.2	Medium-Term Strategy	37
4.4.3	Long-Term Strategies.....	37
4.5	Sector Management.....	38
4.5.1	Improvement of Quality	38
4.5.2	The Labour Market	38
4.5.3	The Internal Management of MoHERST.....	39
4.5.4	Technical and Vocational Education and Training.....	40
5.	SUSTAINABILITY AND FUNDING MECHANISM	41
6.	CONCLUSION.....	43

ABBREVIATIONS

AR4D	Agricultural Research for Development
AIU	American International University
AQAA	Accreditation and Quality Assurance Authority
CHN	Community Health Nurse
CIAM	Centre for Innovation against Malaria
CPD	Continuing Professional Development
CREDD	Curriculum Research, Evaluation and Development Directorate
DSTI	Directorate of Science, Technology and Innovation
ECD	Early Child Development
ECOWAS	Economic Community of West African States
ERNWACA	Educational, Research Network for West and Central Africa
GBoS	Gambia Bureau of Statistics
GC	Gambia College
GSQF	Gambia Skills Qualifications Framework
GTHI	Gambia Tourism and Hospitality Institute
GTMI	Gambia Telecommunications & Multimedia Institute
GTTI	Gambia Technical Training Institute
HEMIS	Higher Education Management Information System
HRD	Human Resource Development
HTC	Higher Teachers' Certificate
ICT	Information and Communication Technology
IKS	Indigenous Knowledge Systems
KIST	Kanilai Institute of Science and Technology
MDGs	Millennium Development Goals
MDI	Management Development Institute
MoFEA	Ministry of Finance and Economic Affairs
MoHERST	Ministry of Higher Education, Research, Science and Technology
MoTIE	Ministry of Trade, Regional Integration and Employment
MRC	Medical Research Council

NaRDIC	National Research, Development and Innovation Council
NARI	National Agricultural Research Institute
NQF	National Qualifications Framework
NTA	National Training Authority
NVQ	National Vocational Qualifications
ODL	Open and Distance Learning
OIC	Organisation of Islamic Conference
OPS	Office of the Permanent Secretary
PAGE	Programme for Accelerated Growth and Employment
PCU	Project Coordination Unit
PS	Permanent Secretary
PTC	Primary Teachers' Certificate
QATT	Quality Assurance Technical Team
R&D	Research & Development
RDI	Rural Development Institute
SEN	State Enrolled Nurse
SMT	Senior Management Team
STI	Science, Technology and Innovation
UTG	University of The Gambia
THEP	Tertiary and Higher Education Policy
TVET	Technical and Vocational Education and Training

EXECUTIVE SUMMARY

The role and importance of tertiary and higher education in the process of national development have been acknowledged and emphasised globally. Therefore, in order to achieve sustainable socio-economic development in The Gambia, it is important to reaffirm the relationship between tertiary and higher education and the workforce and how this steers the development drives stipulated in Vision 2020, the Programme for Accelerated Growth and Employment (PAGE) and other national policy and strategy initiatives.

Globalisation has brought to the forefront such key issues as new knowledge and skills, modes of technologies, qualifications and knowledge application as imperatives that drive education and research, science and innovation. These issues, in turn, pose significant challenges to governments worldwide, including the Government of The Gambia (GoTG) in their quest to provide relevant and quality tertiary and higher education to their citizens.

As the Government arm responsible for tertiary and higher education, the Ministry of Higher Education, Research, Science and Technology (MoHERST) confronts these challenges against the background of a global environment marked by disparities in wealth, social well-being, educational opportunities and resource endowments. To respond to these challenges, policy pronouncements and strategies on tertiary and higher education were developed in the National Education Policy 2004-2015.

In line with the mandate of the Ministry, this Policy (2014-2023) provides a framework to reform the tertiary and higher education sector and discusses a range of thematic areas.

These thematic areas are:

Access and Equity

Quality and Relevance

Research and Development (R&D)

Science, Technology and Innovation

Sector Management

In the last section of the policy, focus is on sustainability and funding mechanisms.

The first part of the policy encapsulates a situational analysis, highlighting strengths, challenges and opportunities in each thematic area. There is a limited number of public tertiary and higher education institutions in The Gambia. Thus the country continues to be confronted with the need for trained human resources at all levels. The situational analysis, from which is generated the problems, policy statements and objectives, was informed by regional consultations, stakeholder dialogues and the review of national and international literature.

In line with the vision and mission of the Ministry, the policy statements and objectives reflect the need for the country to realise the aspirations of Vision 2020, PAGE and other national development blueprints. Importantly, regional and international conventions, benchmarks, guidelines and other relevant instruments have also informed the development of the document.

The third tier of the policy covers strategies to achieve the policy objectives. The policy pronouncements, objectives and strategies revolve around the improvement of sector management, increased access and equity in tertiary and higher education as well as ensuring quality and relevance to the country's development needs and global demands. New emphases, which accord with global development trends, are prominently placed on research and development and science, technology and innovation.

1. INTRODUCTION

It is imperative to reaffirm the role and importance of tertiary and higher education for sustainable socio-economic development in The Gambia. Globalisation in education has put on the agenda, among other complexities, issues of increased cross-border provision of (new) knowledge, modes of technologies, types of providers and qualifications, research, science and innovation.

Tertiary and higher education in The Gambia has to respond to these challenges in a global environment which is characterised by imbalances in wealth, social well-being, educational opportunities and resources. Therefore, sharing knowledge, international cooperation and new technologies can offer opportunities to reduce this gap.

In responding to these challenges, the policy addresses five broad thematic areas. These thematic areas permeate the three main sections of the document that spell out the Situational Analysis, Policy Statements and Objectives, and Strategies. These are preceded by the Introduction. The fifth section discusses Sustainability and Funding Mechanisms, which is followed by the concluding section.

1.1. Background

This section highlights key issues in tertiary and higher education in The Gambia. It advances the *raison d'être*, scope and the thematic areas of the Tertiary and Higher Education Policy. In consonance with the mandate of the Ministry of Higher Education Research Science and Technology (MoHERST), the policy is exclusively specific to tertiary and higher education which, by extension, includes Technical and Vocational Education and Training (TVET), hence its title TERTIARY and HIGHER EDUCATION POLICY, 2014-2023.

Tertiary and higher education has been defined in different ways based on the contextual environment of various education systems. This policy is a blend of several tertiary and higher education models from selected countries which were adapted to suit the Gambian context. Before the establishment of MoHERST in 2007, the National Education Policy 2004-2015 provided the framework for educational development in The Gambia, with a section on tertiary and higher education.

This policy provides a comprehensive and more exhaustive coverage of the national development agenda as regards higher education, tertiary, technical and vocational education and training. Research, science, technology and innovation are also integral parts of this policy. However, it must be acknowledged that the coverage of science, technology and innovation in this policy is limited, as there exists a separate National Science, Technology and Innovation Policy, to which the reader is referred.

There is a limited number of public tertiary and higher education institutions in The Gambia that offer programmes at certificate, diploma and degree levels. In fact, there is only one public university that offers degree programmes. Appropriate systems, structures and the personnel needed to realise (a) national goals and (b) the sector's mandate to strengthen job growth through quality tertiary and higher education are inadequate.

Therefore, The Gambia continues to grapple with the need for trained human resources at all levels. This makes it imperative to institute the required systems and structures for a viable tertiary and higher education sector. Furthermore, it is essential to harness public-private partnerships, while ensuring that the much-needed human resource base is built. To this end, a national project on tertiary and higher education has to be tied to the national blueprints developed after the advent of the Second Republic in 1997. Cardinal among these is Vision 2020 whose goal is:

to transform The Gambia into a financial centre, a tourist paradise, a trading export-oriented agricultural and manufacturing nation, thriving on free market policies and a vibrant private sector, sustained by a well-educated, skilled, healthy, self-reliant and enterprising population, guaranteeing a well-balanced ecosystem and a decent standard of living for all, under a system of government based on the consent of the citizenry.

In principle, in addition to Vision 2020, Poverty Reduction Strategy Paper (PRSP) I (2003-2005) and PRSP II (2007-2011) guided the development agenda of the country until 2012, when the Programme for Accelerated Growth and Employment (PAGE 2012-2015) was developed. These blueprints, as well as international development strategies and other emerging issues, have informed government's resolve to establish

a tertiary and higher education system that is effectively and efficiently responsive to both national and international needs, hence the vision and the mission that will guide the Ministry during this ten-year policy period.

(a) Vision

The Vision of the Ministry is “to play a central role in the transformation of The Gambia into a skills-based economy and knowledge society”.

(b) Mission

Consistent with the Vision, the Ministry seeks “to establish a tertiary and higher education system of reputable (world-class) institutions and centres of excellence that will produce well-educated and skilled citizens with the requisite competencies to lead fulfilled lives and compete nationally and globally”.

(c) Goal

The goal of the Ministry is “to provide equitable access to high-quality and relevant tertiary and higher education that is sustainable and responsive to national and global needs”.

1.2 National Priorities

A fundamental priority of the Government of The Gambia is for the citizens to be among the most educated and skilled in the world in relation to university studies, research and knowledge diffusion. In pursuit of this, the tertiary and higher education sector accords the following priorities topmost preference:

(a) Short Term

1. Linking effectively with the basic and secondary education sector and other sectors to provide a continuum of high-quality lifelong learning opportunities, and providing students with a stimulating and rewarding tertiary and higher education experience;
2. Initiating a sector-wide reform which entails the restructuring of the existing structures, where necessary, establishing relevant structures and systems and instituting essential legislative and regulatory frameworks;

3. Upgrading the existing infrastructure and facilities, while creating new ones to enhance more conducive teaching and learning environments;
4. Promoting and participating in in-country and global partnerships, networks and exchange programmes;
5. Facilitating student and staff mobility, in addition to supporting the sharing of knowledge, ideas and best practices.

(b) Medium Term

1. Increasing the number of graduates in the sciences substantially and graduating students with quality and relevant knowledge, skills and understanding for full participation in the nation's socio-economic development;
2. Linking tertiary and higher education to economic development and poverty reduction through appropriate programmes;
3. Responding comprehensively to the capacity needs of both the public and private sectors;
4. Playing a pivotal role in the national Research and Development and innovation systems through the generation, dissemination and application of (new) knowledge and skills across a wide range of disciplines.

(c) Long Term

1. Providing access and equal opportunities for all capable Gambians to participate to their full potential in knowledge and skills acquisition and application;
2. Transforming the University of The Gambia (UTG) and other public institutions into reputable world-class institutions and centres of excellence;
3. Repositioning STI and R&D as the main drivers for wealth creation, economic development and social progress.

A critical reflection on these priorities suggests that The Gambia's tertiary and higher education system has to lead to self-fulfilment, personal development and the pursuit of life-long learning. Additionally, it has to address adequately the provision of skills for critical analysis and independent thought; the preparation of patriotic citizens and leaders for diverse, global environments; and mediate the creation of a highly productive and professional labour force.

Taking all the foregoing into consideration, the core mandate of MoHERSTembodies taking full responsibility for the provision of quality tertiary and higher education, research, science, technology and innovation for socio-economic development. In line with this, the policy direction for the tertiary and higher education sector has to be provided by the Ministry, thus the justification for this policy.

1.3 Justification for the Policy

The 21st century has brought with it new global academic challenges that continue to transform radically the way human resources are developed and managed. Caught in the middle of this emergent transformation praxis, nations have realised that the types of personnel, skills and infrastructure that enabled successes in the 20th century to continue to evolve alarmingly. Within this fluid, but vibrant world order, The Gambia, like other developing countries, competes with the economic superpowers and other nations (whose citizens strive desperately to uplift their standards of living and security) for the world's resources and opportunities.

The emerging challenges linked to this state of affairs calls for ingenuity and huge investments in human resource development for intense knowledge generation and spectacular innovation, as witnessed in modern times, and prolificacy in production and productivity for economic development and overall progress.

In the thick of this increasingly dynamic and hostile global environment, the need is most pressing to formulate coherent and robust sector policies and plans to respond squarely to all the attendant challenges and intricacies embedded in the globalisation euphoria and to complement the existing national instruments and frameworks that are crafted to generate outcomes specific to both the national and global contexts.

Guided by this principle, the THEP is intended to project the centrality of tertiary and higher education in national development and to enhance, in very significant ways, the indelible and much-expected contribution of the Gambian tertiary and higher education sector to the transformation of the country into a skills-based economy and knowledge society. Admittedly, however, these cannot be attained in the absence of a credible and viable tertiary and higher education system, characterised by reputable institutions that produce respectable and competent graduates able to strengthen the existing workforce, while gradually building the envisioned society enunciated in the country's national vision, goals and aspirations.

The policy pronouncements, objectives and strategies, enveloped in the five thematic areas in this document, are designed to propel the realisation of these national goals. Within this context, in tandem with complementing the NSTIP, the THEP provides the broad parameters of a national framework for The Gambia to harness its tertiary and higher education sector in order to emerge as an economic giant and a 'model community' among the comity of nations.

2. SITUATIONAL ANALYSIS

This section describes the current picture in the five thematic areas around which the policy issues are grouped. It provides the justification for change and for the proposed new policy statements and objectives that follow in the next section.

2.1 Access and Equity

From the 1990s to date, tertiary and higher education in The Gambia has experienced a rapid expansion as a result of persistent increase in demand.¹ This is happening at a time of a global economic downturn which, inevitably, has some negative impacts on the economic performance of the country and, consequently, on the achievement of the objectives of tertiary and higher education. Therefore, it is not surprising that the government's budgetary allocation for tertiary and higher education has not grown in line with enrolments.

The Government of The Gambia supports a culturally diverse and socially cohesive nation, and believes that all Gambians, regardless of their cultural, linguistic, religious and physical background, should be given every opportunity to participate fully in the development of the country.

The Gambia is home to over 220,000 young people aged between 18 and 25 years.² The majority of these youth have high educational aspirations, although these do not always match the outcomes. While some of them experience a smooth pathway into higher education, many do not realise their dreams, thus limiting their opportunities to further education and training.

The rapid increase in the number and variety of tertiary education institutions and the massive increase of enrolment levels remain a major challenge to tertiary and higher education policymakers. Fixing The Gambia's education system to meet the needs of under-educated youth and helping the country produce a well-educated and skilled citizenry and workforce will require a simultaneous strengthening of this level of

¹ Country Status Report (CSR), 2010

² Gambia Bureau of Statistics, 2003

education. The solution lies in equity-focused reforms of both systems, with specific attention to the relationships and transitions between the educational institutions that constitute these important systems. Fortunately, there are a number of institutions uniquely positioned to address the preparation of this group and to move them to acquire academic and vocational qualifications.

By virtue of the location of most tertiary and higher education institutions in the Greater Banjul Area, students living in this area have a greater chance of accessing tertiary and higher education. Furthermore, there are regional and gender disparities in access to education, in general, and senior secondary school education, in particular, which is the transiting level to tertiary and higher education.³

Equity is also related to affordability. In a country where a significant number live under the poverty-datum line of less than \$1.25 a day⁴, the issue of affording tertiary and higher education becomes more pronounced. It should be noted that the majority of Gambians are farmers, whose incomes are inadequate to support their children at the tertiary and higher education level. The relatively high fees for tertiary and higher education favour the continued admission of children from the highest-income quintiles and, consequently, reinforce the inequalities in society.

The relationship between TVET institutions and higher education institutions requires strengthening in order to create better linkages between occupational courses and other academic disciplines and to further enable students to pursue not only viable careers but also advanced educational goals.

Given the demographic scenarios in The Gambia, the post-secondary population in 2003 was 222,831; this consisted of the age group between 19 and 25. If projected, this population should increase to 290,744 in 2012, 317,704 in 2015 and 368,306 in 2020.

³ CSR, 2010

⁴ MDG Status Report - The Republic of The Gambia, 2012

The Gambia has three main tertiary institutions that run certificate and diploma programmes, and one public higher education institution that offers programmes at degree levels, which is the University of The Gambia. Two other private higher education institutions were established in 2012; concentrating on Islam-related courses, medical programmes and the social sciences. Altogether, the four public tertiary and higher education institutions admitted a total of 6,325 students in 2009. This figure increased by 10.3% in 2011, making up 19.1% of gross intake (total number of intake as a percentage of the 19-year-old population) of the country. Gambia College, which has 90% of its admission in the School of Education, constituted 36.8% of the overall public tertiary and higher education admissions in 2011. The UTG constituted only 17.7% of the total admissions. However, it has the largest growth rates – 124.5% between 2009 and 2011. GTTI, which provides mainly technical and vocational education and training, registered a negative growth of 11% during the period. The Management Development Institute (MDI), which trains on-the-job students and middle-cadre civil servants, constituted 25.9% of the total admissions at this level, with a registered growth of only 1.6%. About 72 TVET institutions that registered under the National Training Authority admitted 5,720, 7,206 and 6,396 students in 2009, 2010 and 2011, respectively, constituting 18.19, 22.32 and 19.29 per cents of gross intake in the respective years.

In 2012, the number of students in the final year of secondary education was 40, 533 (19, 227 of which were female), representing a participation rate of 36.2%. Overall, 30.3% completed the secondary school cycle, but this does not necessarily translate to university entrance.

The achievement of the goals contained in Vision 2020 and other national blueprints is premised on the existence of well-educated and professional citizens. However, this can only be achieved through the provision of a relevant and quality tertiary and higher education that is accessible to all those who are qualified to transit to this level of education, including the physically challenged.

2.2 *Quality and Relevance*

The Gambia, like most countries, is faced with the challenge of making its education, especially at the tertiary and higher education levels, relevant and of high quality. Generally, several issues militate against achieving quality and relevant education, ranging from the inadequacies that are linked to funding, personnel, infrastructure and equipment to the absence of effective monitoring and supervision tagged to a quality assurance system.

The limited access to tertiary and higher education among young Gambians has an impact on the workforce preparation of the nation. Furthermore, there is a limited number of qualified teaching personnel at this level hence a heavy dependence in some disciplines on non-Gambian teaching staff.

‘Quantity’ has in most cases a negative effect on ‘quality.’ This has also been an issue affecting the quality of teaching in The Gambia’s tertiary and higher education institutions. Although the teacher-student ratio is about 1: 40 in many disciplines at tertiary and higher education institutions, in some instances, there are large class sizes that exceed hundred students. This can have a direct bearing on quality education delivery.

There is a low number of TVET graduates to take care of the national demands for skilled human resources for the socio-economic development of the nation. Most of the country’s skills-based workforce consists of people from the sub-region. Currently, both MoTIE and MoHERST do not have adequate data to be able to make skills labour projections up to the end of the policy period.

Presently, training at most TVET institutions does not adequately respond to the labour market needs for the socio-economic development of the country. As a result, it is not given the consideration it deserves and, for this reason, requires strengthening so that more students regard technical and vocational education as viable opportunities.

The indication is that most laboratories, workshops, library facilities and services in the tertiary and higher education institutions are not sufficiently equipped to cater for

the training and research needs of the learners and teaching personnel. Furthermore, much of the equipment used for training is either obsolete or requires servicing; in some cases, the student-equipment ratio is high. These shortcomings are compounded by insufficient physical facilities to cater for the high demand for tertiary and higher education in the country.

There is inadequate and unreliable internet connectivity, and access in public and private institutions is limited, especially for facilitating open and distance education. The mass media is not fully utilised for training in the institutions.

As a result, the remuneration packages offered in tertiary and higher education institutions in the country, in comparative terms, are not enticing enough to attract eminent academics and administrative staff. The inability to recruit highly qualified staff often results in the recruitment of adjunct or part-time lecturers, which has implications for quality delivery.

While work in some institutions is positively challenging and stimulating for some, there has been a relatively high staff attrition rate at this level. It is logical to conclude that an environment that is not conducive enough for teaching and learning impacts negatively on quality delivery and learning outcomes.

With the absence of a standardised quality assurance framework for tertiary and higher education, the institutions are mainly self-regulated, and they use their own internal quality assurance mechanisms.

Training programmes are not coordinated to allow a smooth transfer of relevant academic and professional credits. Furthermore, most curricula are not harmonised for credit transfers. There is also limited coordinated public and private partnership in student training and placement. Research and development processes have not been adequate enough to enhance the quality and relevance of the education system.

2.3 Research and Development

Most research activities in The Gambia are carried out by such institutions as the National Agricultural Research Institute (NARI), the Medical Research Council

(MRC), the Centre for Innovation against Malaria (CIAM), the Curriculum Research, Evaluation and Development Directorate (CREDD) of the Ministry of Basic and Secondary Education (MoBSE), the Educational Research Network for West and Central Africa (ERNWACA) and the University of The Gambia (UTG).

NARI is the country's principal agricultural research institute, accounting for two-thirds of public agricultural R&D. It has now adopted a new strategy – Agricultural Research for Development (AR4D) – in which all the stakeholders within the R&D system are involved in the planning and implementation of research activities.

Research is not optimally recognised and/or appreciated as an important means of generating knowledge and adding value to products and services produced by the public and private sectors. There is insufficient investment in research and development at national and institutional levels; and, although there is a National Ethics Committee for ethical issues in health research, there is no national research council with clearly defined oversight functions within a policy setting.

2.4 Science, Technology and Innovation

The post-independence push to create STI capacity, in order to ensure STI drives socio-economic activities, progressed slowly due to a number of constraining factors. Some of the causes could be attributed to inadequate resources, the absence of a vision for STI development at the time and the failure to develop a National STI Framework within a well-defined policy.

However, much progress has been made over the years, especially over the past two decades. Some of the existing institutions that deliver STI-related programmes are GTTI – mainly responsible for skills training; GC – for the middle-level training in agriculture, education, nursing, and public and environmental health; the Rural Development Institute (RDI), the UTG – for higher level-science education and training.

2.5 Sector Management

In view of the increasing number of secondary school graduates arising from the considerable expansion of the basic and secondary school system, there is increasing

pressure and a growing challenge on Government to increase correspondingly access to tertiary and higher education and, by extension, improve on service delivery within the sector. New and diversified approaches to development, the adoption of new technologies and the search for solutions, especially through well-trained professionals and skilled technicians, also necessitate continual review, improvement and updating of the content, quality and relevance of tertiary and higher education programmes provided in the country.

In response to these huge challenges, the proliferation of tertiary institutions in recent years and the numerous courses offered, amid the increasing interest from outside to establish private universities in the country, further complicate the management and governance issues and tasks at hand, as well as the processes that have a bearing on the latter. These issues and tasks include:

1. Integrating strategically the courses of selected public tertiary and higher education institutions by harmonising their programmes and instituting administrative arrangements to optimise resource use and credit transfer, and ensure quality;
2. Enhancing equity and equality in education and training opportunities and, more importantly, supporting the realisation of the Ministry's corporate aim of helping the country to attain sustainable growth and development, as contained in the national blueprints;
3. Regulating private-sector providers of tertiary and higher education effectively;
4. Developing adequate skilled human capital necessary to develop and transform the sector;
5. Strengthening the sector's institutional capacities for improved and efficient personnel, quality service delivery and optimum output at all the levels;
6. Promoting the values of the Ministry, such as professionalism, hard work, focus, integrity, innovativeness and team spirit;

7. Facilitating the establishment of systems and procedures to support the process of reviewing the statutory functions and duties of staff to ensure efficiency and effectiveness in meeting the sector's agenda.

Conceptually, within the framework of this policy, TERTIARY AND HIGHER EDUCATION refers to post-secondary education and incorporates technical and vocational education and training, professional education, university education and research. A major constraint that has marred the provision of tertiary and higher education in the country has been the absence of a national higher education regulatory body, thus limiting effective control, monitoring and evaluation of progress and performance in both public and private institutions.

However, the establishment of the National Training Authority, through an Act of Parliament in 2003, and the development of the Gambia National Skills Qualifications Framework (GNSQF) have contributed significantly to the regulation of TVET institutions. To the credit of the Gambian TVET system, the GNSQF stands out as a laudable achievement within the ECOWAS sub-region, and it continues to be a source of strength to build on. Therefore, to regulate and assure the quality of the higher education institutions, it is essential to establish an appropriate regulatory body that would complement regulation within the TVET sub-sector.

The five broad areas encompassing tertiary and higher education are outlined below in accordance with the mandate of MoHERST.

1. University Education and Research and Development

University education in The Gambia covers degree-awarding institutions legally established as institutions of higher learning. Besides degree programmes (Bachelor's, Master's and Doctorates), these institutions may offer certificates, diplomas, advanced diplomas or their equivalents.

Prior to the establishment of the university extension programme, organised in 1997 in collaboration with St Mary's University in Canada, Gambians sought university education overseas. It was not until 1999 that the first university, UTG, was founded. This public university has since reduced the heavy dependence on external

universities for training. While two private universities are now in operation, keen interest has been shown by potential proprietors to start new universities or run campuses affiliated to universities operating elsewhere. Access to online education is also rising, although this controversially calls to question the adequacy, relevance and quality of some of the courses. All of these issues have to be addressed through a well-coordinated management framework.

Research and Development in the higher education sector embraces all aspects of research, and involves partnerships and collaboration within and outside the country. Regrettably, in The Gambia, the depth and scope of R&D and its contribution to national development are not substantially sufficient, and, therefore, need to be augmented significantly for it to have a decisive impact on the economy. Lessons learnt from 'high-income countries' and the rising nations in Asia and Africa cogently point to the essentiality of inputting considerable levels of investments and dedicated service in R&D.

Rising to the challenges of transforming the country, as articulated earlier, requires harnessing R&D optimally, which further calls for a skewed focus on the sciences and R&D. As exemplified by industrialised nations, the private and public sectors must play a collaborative role in this direction and act in concert with higher education and research institutions. To fulfil this responsibility, such institutions, particularly public universities, have to undertake consultancies and research projects in developmental, interventionist and policy-related research, aside from other forms of conventional and unconventional engagements.

2. Professional Education and Training

Tertiary and higher educational institutions established to conduct professional education and training in various fields of study in The Gambia are principally the UTG, GC, MDI and GTTI. Other institutions include: GTMI, GTHI, CHN and RDI. Together, they offer long and short courses in teacher education, nursing and midwifery, public and environmental health, agriculture, tourism and hospitality, information and communication technology (ICT), management and rural development.

A recently concluded tracer study on Gambian graduates indicates that there is a high employment rate ($\approx 100\%$) associated with the professional programmes, as opposed to a high unemployment rate (14% - 23% in 2008 and 32% - 68% in 2010) for the TVET programmes. The study also suggests that a high proportion of those employed from the professional programmes are in the public sector/parastatals (46% - 100%), whereas a high proportion of TVET graduates are employed in the private sector/family businesses (52% - 82%).

3. Technical and Vocational Education and Training (TVET)

In addition to what is provided above on TVET, it suffices to say that a well-defined system exists that caters for training in technical and vocational knowledge and skills from apprenticeship to managerial levels, as enshrined in The Gambia Skills Qualifications Framework (GSQF). The framework addresses TVET qualifications, which include programmes in certificates, diplomas and degrees or their equivalents. In spite of the merits associated with this framework, it is important to situate the GSQF within an overall National Qualifications Framework that runs across the entire education system – from ECD to university education. The absence of an NQF, for instance, continues to debar TVET graduates from pursuing higher education at the UTG. Thus, there is a need to institute a well-managed, unified education system with clear-cut pathways for ‘continuing’ education and lifelong learning.

4. Science, Technology and Innovation (STI)

In parallel with this policy, a National Science, Technology and Innovation Policy (NSTI) has been developed to ensure that science and technology pervade all the sectors of the economy. In order to achieve this objective, sector policies, programmes and strategies need to be developed and/or revised in tandem with the overall NSTI Policy. This notwithstanding, the sector needs a wholesome policy that hinges on all the core activities, programmes and systems within the ambit of the Ministry and its line institutions.

5. Administration and Coordination of Tertiary and Higher Education

At the formulation phase of this policy, MoHERST discharged its functions through three technical directorates and a unit, namely:

- a) Directorate of Higher Education
- b) Directorate of Research and Planning
- c) Directorate of Science and Technology
- d) Projects Implementation Unit

A Senior Management Team (SMT) provides technical support and policy advice to the Ministry, especially the Administration.

Taking into consideration all the important issues that have emerged since the inception of MoHERST in 2007, it is imperative to review these structures and redefine their core mandates in line with the policy direction that will be provided for the years ahead.

3. POLICY STATEMENTS AND OBJECTIVES

3.1 Guiding Sector and Institutional Governance

The reforms being introduced within the tertiary and higher education system require a new relationship between Government and institutions of higher learning, which recognises the value of institutional autonomy while promoting excellence, supporting growth and maintaining international competitiveness.

In recognition of this fact, Government will maintain the principle of institutional ‘autonomy’, while ensuring accountability, within the ambit of prescribed mandates, responsibilities and expected results during the policy period.

3.1.1 Accountability

In discharging its responsibility of providing quality tertiary and higher education and training to the citizenry, it is essential for the government to develop and implement a sector-wide accountability framework which is consistent with a broader funding, governance and regulatory framework. In particular, the framework should:

- a) place primary accountability for performance on the provider’s governing body
- b) provide for accountability procedures to the state that are simple, clear and transparent, with funding aligned with stakeholder demands
- c) ensure that any legislation emphasises accountability of all the institutions (private and public) to the state in general and MoHERST in particular
- d) reflect negotiated or set targets in relation to performance-based funding
- e) ensure that there is compliance with all the relevant guidelines and/or legal frameworks for the appropriation of public funds.

The realisation of these targets will be supported through legislative change and the introduction of new funding and incentive mechanisms tied to outcomes and performance.

3.1.2 Autonomy

Institutional governance could be linked to the structures and processes within which institutions are given autonomy to plan and manage their affairs so as to achieve both national and institutional objectives. Such arrangements are often linked to procedures and other related regulatory mechanisms. Clear lines of accountability are fundamental at the institutional level, and have to be established for and within every institution. These include reviews of performance pegged against well-defined goals; external quality reviews and internal quality assurance processes for teaching and academic programmes; reporting on financial accounts and conducting creditable internal and external audits; and good governance through information reports and statistics to the governing body.

Autonomy for tertiary and higher education institutions will be balanced by increased accountability, transparency and expectations of better outcomes. As ‘quality’ is an important element of accountability, curricula reviews, aimed at making courses more relevant to the requirements of the labour market, have to be done regularly. A rigorous quality assurance regime also needs to be established to ensure the development and maintenance of high-quality education in all the institutions.

The development of institutional tertiary and higher education strategic plans, within the framework of a national sector-wide strategic plan, is essential also to further the reform of the sector, especially as it relates to governance and autonomy.

All public tertiary and higher education institutions will be semi-autonomous within an accountability framework. The statutory governance bodies for any university will be the governing council and senate. Tertiary and higher education institutions will be governed through the following legislative instruments:

1. A National Tertiary and Higher Education Act;
2. A legislative framework for the establishment of public and private institutions of higher learning in The Gambia;
3. The Accreditation and Quality Assurance Act as regards the quality of education provided;

4. Other related laws of the land, including regulations developed by MoHERST;
5. Public institutions will be regulated through the legal frameworks specific to their establishment and operations.

3.2 Access and Equity

The following policy pronouncements will be pursued in order to ensure equitable access to tertiary and higher education in The Gambia:

1. Increasing participation rates in tertiary and higher education institutions will continue to be accorded top priority through the development of enrolment strategies.

Policy Objective:

- *To increase admissions in tertiary and higher education by 50% of 18-20-year-olds by 2023.*

2. The provision of relevant tertiary education in the country will be decentralised gradually through the expansion and diversification of TVET programmes in all the regions of the country, especially in the rural areas.

Policy Objective:

- *To establish and/or strengthen the equitable provision of technical and vocational education in the regions.*

3. In partnership with non-state actors, Government will strive to make quality tertiary and higher education services more accessible and affordable to all, including the under-served, regardless of political, national, ethnic or religious affiliations.

Policy Objective:

- *To increase equitable access to affordable quality tertiary and higher education to the citizenry.*

4. In view of the existence of barriers to female participation in tertiary and higher education, programmes that are gender responsive and offer equal opportunity for both sexes will be promoted.

Policy Objective:

- *To promote equal opportunity and gender responsiveness in all tertiary and higher education programmes.*

5. In partnership with other stakeholders and partners, greater efforts will be directed towards encouraging women and girls to pursue tertiary and higher education, especially in the sciences and mathematics.

Policy Objective:

- *To reduce gender disparities in enrolments in mathematics and other core sciences.*

6. Government will encourage and facilitate the creation and development of appropriate infrastructure and facilities in the tertiary and higher education institutions, with due attention paid to the physically challenged.

Policy Objective:

- *To increase access to tertiary and higher education and services for the physically challenged.*

7. To respond to the increasing demand for tertiary and higher education, the Ministry will encourage the establishment of reputable private institutions to address skills gaps through the participation of both state and non-state providers.

Policy Objective:

- *To provide the necessary regulatory framework including legislation that allows the full participation of the non-state actors in providing tertiary and higher education service delivery in order to address the skills gaps.*

8. In order to widen access to those wishing to study at work or from home, support will be provided to create opportunities for all through distance learning programmes and other innovative approaches.

Policy Objective:

- *To promote use of open and distance learning and non-traditional modes of programme delivery in The Gambia.*

9. The Ministry responsible for education will develop and implement a National Qualifications Framework that cuts across the entire education system that defines pathways for students, allows for smooth credit transfer and recognises relevant educational achievement.

Policy Objective:

- *To develop and implement a National Qualifications Framework for all the levels of tertiary and higher education, incorporating the existing Gambia Skills Qualifications Framework.*

3.3 Quality and Relevance

One of the key functions of MoHERST is to ensure that all the providers of tertiary and higher education offer high-quality and relevant education to their students. This cannot be achieved in the absence of proper regulation of the sector. To this end, the assurance of quality and relevance in the sector will be enhanced by the following policies:

1. MoHERST and other stakeholders will ensure that the quality of all tertiary and higher education delivered in The Gambia is up to international standards and will encourage the external review of programmes in the institutions within the country.

Policy Objective:

- *To establish a national Accreditation and Quality Assurance Authority to assure the quality of all the tertiary and higher education institutions and programmes.*

2. The performance of the sector's institutions will be subjected to periodic reviews, in accordance with the Quality Assurance Framework, which will be revised periodically to ascertain that the emerging quality issues are addressed.

Policy Objective:

- *To develop quality assurance standards and benchmarks for tertiary and higher education institutions in conformity with international standards.*

3. All the institutions will establish internal quality assurance mechanisms and conduct regular staff appraisals for the promotion and identification of training needs. These internal arrangements will be linked to the existing external, national quality assurance and appraisal framework.

Policy Objective:

- *To develop and institutionalise internal quality assurance mechanisms, including a staff appraisal system within all the tertiary and higher education institutions.*

4. As stipulated in the QAF, all the institutions will have to comply with the standards set for the provision of the facilities required in such institutions and have clearly defined conditions of service for the maintenance of a conducive teaching and learning environment that responds to the needs of both students and staff.

Policy Objective:

- *To improve the physical facilities and conditions of service to foster a conducive teaching and learning environment.*

5. Government, through the relevant educational institutions, will strive to provide appropriate training to ensure the availability of qualified and skilled human capital to meet the labour-market and development needs of the country.

Policy Objective:

- *To develop and offer programmes in institutions that are relevant to the socio-economic needs of the country and the clientele.*

6. In line with best practices, the integration and application of ICT in curriculum design and teaching-learning processes in the tertiary and higher education institutions will be accorded top priority and pursued during the policy period.

Policy Objective:

- *To provide an environment in which all teaching and learning in public institutions is supported by ICT, where appropriate.*

3.4 Research and Development

As the Ministry responsible for research, MoHERST is committed to giving R&D a new impetus through the cultivation of a research culture, building research capacity and fostering research techniques in all the institutions. In view of this commitment, the pronouncements and objectives given below will be pursued:

1. In partnership with other stakeholders, the Ministry will work towards strengthening the research infrastructure and capabilities within the tertiary and higher education sector in order to increase research output.

Policy Objective:

- *To support institutions to establish the prerequisite infrastructure and mobilise funding for research activities.*

2. Government will initiate joint, strategic ventures for adequate and sustainable financing of tertiary and higher education research in The Gambia, as well as seek funding for research endowment Chairs and Units from non-state actors and affluent individuals to encourage research in various fields or disciplines.

Policy Objective:

- *To improve the volume and efficient appropriation of funds from government and other sources for tertiary and higher education research activities.*

3. MoHERST will promote and support the establishment of links between tertiary and higher education institutions in The Gambia and other relevant institutions in the sub-region and beyond for closer collaboration and cooperation in research work.

Policy Objective:

- *To build partnerships, linkages and networks to help increase the volume and improve the quality and relevance of research undertaken in the tertiary and higher education sector.*

4. Government will encourage institutions and, where feasible, provide support for them to increase the number of academic staff with doctorate degrees to improve the volume and quality of research carried out in the country.

Policy Objective:

- *To encourage institutional and individual capacity building to acquire a critical mass of researchers in the country.*

5. MoHERST will continue to encourage tertiary and higher education institutions to undertake applied research and consultancies (national and international) in addition to other fundraising activities and community service.

Policy Objective:

- *To encourage the application of research and development activities, including the incorporation of indigenous knowledge and to protect intellectual property rights as they relate to research and development.*

6. In collaboration with other stakeholders and partners, MoHERST will develop a research agenda and map out a framework to coordinate national research activities.

Policy Objective:

- *To encourage NaRDIC to develop a national R&D Strategic Plan to guide the implementation of research activities and programmes.*

3.5 Science, Technology and Innovation

Government considers it vital to harness science, technology and innovation better for socio-economic development, hence the formulation of a comprehensive National Science, Technology and Innovation Policy. Within the context of the NSTIP and this policy, the Ministry will coordinate, integrate and harmonise STI national processes to ensure the effectiveness and sustainability of STI interventions.

Policy Objective:

- *To coordinate, integrate and harmonise STI national processes in the education sector and to monitor their successful implementation.*

3.6 Sector Management

To enhance the management of the tertiary and higher education sector, the government will collaborate with other stakeholders to implement the policy pronouncements and objectives that follow:

1. Concerted efforts will be made to identify strategic areas of need and demand for tertiary and higher education service provision, and manage and coordinate the equitable provision of such services across all the administrative regions in order to offer decentralised services, especially where they can be supported by the presence of other regional structures.

Policy Objective:

- *To provide relevant MoHERST support to all the regions.*
2. The Minister will be responsible for leadership and policy oversight of the sector. There will be a Permanent Secretary (PS) responsible for providing administrative, professional and intellectual leadership to the Ministry. As the Chief Executive Officer and Accounting Officer, the PS will advise the Minister on policy matters in his/her oversight functions. The PS will be assisted by Deputy Permanent Secretaries and other staff for the effective and efficient implementation, coordination, monitoring and evaluation of all management and operational matters within the sector.

The technical arm of the Ministry will comprise the following;

- Directorate of Planning, Budgeting and Policy Analysis;
- Directorate of Tertiary and Higher Education;
- Directorate of Research and Development;
- Directorate of Science, Technology and Innovation;
- Projects Implementation Unit.

Policy Objectives:

- a) *To establish structures and develop mechanisms that will enable the Minister and Permanent Secretary to carry out their leadership and policy functions.*
- b) *To recruit and deploy suitably qualified and skilled staff to enable the Ministry to deliver on its mandate and key functions.*

3. As part of the governance of the sector, regulatory bodies such as AQAA and NaRDIC will be established and strengthened, together with the other existing regulatory bodies. These bodies will report to the Minister.

Policy Objective:

- *To provide an effective and efficient regulatory mechanism for both public and private tertiary and higher education institutions in the country.*

4. A system of monitoring and evaluating those programmes that are aligned to the mandate and functions of the Ministry will be instituted. Similarly, the individual Directorates and Units will monitor their activities and generate quarterly reports. A central monitoring and evaluation unit will compile all unit reports and produce a centralised quarterly monitoring and evaluation report, in conjunction with the Policy Objectives of the Ministry.

Policy Objective:

- *To establish a centralised reporting and monitoring system within the Ministry for effective and efficient internal operations.*

5. As one means of managing the sector, the Ministry will arrange Quarterly Sector Reviews, which will bring together the relevant tertiary and higher institutions and other key development partners. These bodies will review all

the activities carried out within each quarter of the year. This will be geared towards enabling the Ministry to examine the implementation status of its projects and programmes. These stakeholder-wide meetings will serve as a support structure for the implementation process, which will take the form of institutional progress reviews.

Policy Objectives:

- a) *To conduct progress reviews in all public tertiary and higher education institutions.*
- b) *To develop mechanisms for supervising, coordinating and monitoring all the public tertiary and higher education institutions within the country.*

6. The annual sector reports will set the stage for the preparation of an annual retreat. The institutions in the sector will converge to review individual institutional reports along set criteria, and map out the way forward; this is critical in the management of the sector. These reviews will enable the tertiary and higher education fraternity to harmonise their institutional strategies and identify areas of cooperation and mutual support.

Such annual sector progress reviews will help identify the strengths and weaknesses, as well as reveal the opportunities and options for improvement of the human, material and financial resource base of the sector and thus enable the sector to plan better.

Policy Objective:

- *To conduct annual sector reviews on all the activities in order to plan and encourage harmonisation and coordination within the sector.*

7. The Ministry will work towards integrating some of the current public tertiary and higher education institutions under one umbrella for more judicious use of resources, better access to quality education and greater student mobility within and across institutions and programmes.

Policy Objective:

- *To achieve the successful implementation of the integration of MDI, GC, GTTI and NARI into the UTG.*

8. Since The Gambia has a growing education sector, government will encourage the internationalisation of the sector in line with global best practices. In particular, support will be provided to public institutions to strive to attain world class status.

Thus, the tertiary and higher education institutions will be encouraged further to link up and/or form partnerships with other relevant international and professional bodies and institutions.

Policy Objective:

- *To conduct periodic reviews of the tertiary and higher education curricula based on international standards in order to attract foreign students; and prepare students for global competitiveness.*

The above policy statements and objectives will enable the country to follow the implementation strategies outlined in the next section.

4. POLICY IMPLEMENTATION STRATEGIES

5.1 Access and Equity

The following strategies will be employed to increase access to and equity in tertiary and higher education.

5.1.1 Expanding Access

1. Negotiate for increased government funding to MoHERST for tertiary and higher education based on enrolment and graduation targets and the increased recurrent costs arising from the establishment of new campuses and structures;
2. Encourage private-sector participation in the provision of higher education;
3. Decentralise the delivery of tertiary and higher education institutions and encourage their de-concentration in the urban areas;
4. Increase the capacity of tertiary and higher education institutions in terms of available space by about 3% per annum;
5. Enhance access to career guidance and counseling services in all the tertiary and higher education institutions;
6. Provide appropriate and reliable communication infrastructure to facilitate the provision of relevant materials and opportunities for students to interact among themselves and with their tutors.

5.1.2 Providing Affordable Tertiary and Higher Education

1. Offer more scholarships and bursaries, especially to female and needy students;
2. Collaborate with non-state actors (*e.g.* banks) to provide scholarships to meritorious students;
3. Ensure that tuition fees for the programmes offered at tertiary and higher educational institutions are 'affordable', and not more than 150% of

national gross domestic product (GDP) per capita in public tertiary and higher education institutions;

4. Establish students' loan schemes for needy students.

5.1.3 Gender and Equity

1. Provide scholarships to female mathematics and science students enrolled in tertiary and higher education institutions;
2. Promote the appointment of female lecturers in the sciences and mathematics-related disciplines, with attractive incentives;
3. Eliminate all forms of discrimination that hinder enrolment, participation, performance and retention in tertiary and higher education, especially for the physically challenged.

5.1.4 Facilitating Access

1. Create collaborative networks for ICT and electronic resources with the relevant institutions;
2. Encourage the improvement of internet connectivity;
3. Build the capacity of lecturers to facilitate the implementation of access and equity strategies;
4. Improve availability and access to library facilities and services for the stakeholders of tertiary and higher education institutions.

5.2 *Quality and Relevance*

5.2.1 National Qualifications Framework (NQF)

1. Develop a framework with criteria and standards for assessing academic quality and achievement in the sector;
2. Ensure the provision of external quality reviews by the AQAA of both institutions and programmes in the public and private institutions;

3. Ensure the introduction of a comprehensive regulatory framework over the operations of the non-state providers of tertiary and higher education;
4. Encourage public-private partnership in student training and placement;
5. Change the image of technical and vocational education and training as a second option and accord it due prominence as an integral and important area of specialisation.

5.2.2 Quality of Teachers and Academic Staff

1. Give priority to the training of teachers at the tertiary and higher education levels to reduce the teacher requirement gaps at the basic and senior secondary education levels;
2. Review and strengthen the teacher education programmes to provide adequate and competent teachers, especially technical teachers for TVET programmes;
3. Develop a performance appraisal policy, in collaboration with the higher educational institutions, to cover staff welfare, including remuneration, promotion and retention;
4. Conduct academic staff appraisals on a quarterly basis in order to reward performance in all the tertiary and higher education institutions;
5. Require the tertiary and higher education institutions to develop and implement a Continuing Professional Development (CPD) Plan;
6. Strengthen staff training to ascertain quality service in tertiary and higher education institutions;
7. Provide incentives to the teaching staff, especially science teachers;
8. Provide scholarships to curb the shortage of potential and qualified teachers in order to train the required number of teachers to fill the teacher-needs at the school level, especially in senior secondary schools.

5.2.3 Improvement of Facilities

1. Engage telecommunication and financial institutions to establish internet hubs and other ICT facilities;
2. Provide relevant science equipment to facilitate educational undertakings, particularly research and development;
3. Promote the provision and use of internet servers, hubs and other accessories for public tertiary and higher education institutions;
4. Encourage the use of the mass media in teaching and learning;
5. Provide adequate physical facilities to foster a conducive learning environment;
6. Revive and renovate training institutions, wherever the need arises.

5.2.4 Relevant Programmes

1. Conduct labour market research, in collaboration with relevant institutions, to determine the training needs of the country;
2. Promote inter-institutional relations in all the institutions to facilitate smooth credit transfer for students in related fields.

4.3 *Research and Development*

4.3.1 Coordination and Management

1. Develop a national policy for research, and ensure the strategic and centralised management of R&D in the country (NaRDIC);
2. Organise periodic training in R&D in selected regions and institutions as and when deemed necessary and feasible;
3. Engage more internationally renowned researchers, including Gambian researchers in the Diaspora, in order to develop and strengthen the existing and new research environments;

4. Implement a special initiative or ‘incentive package’ to attract prominent international researchers to The Gambia;
5. Strengthen the innovativeness of Gambian researchers by building upon the existing knowledge in the context of the sector;
6. Link education, research and innovation in the form of a knowledge triangle concept for commercialisation and, ultimately, growth and development;
7. Create incentives to promote investment and support in R&D by the private sector;
8. Enhance collaboration between (exclusively) research institutions and higher education institutions in order to train high-level research and scientific personnel;
9. Create the mechanisms for ensuring that research is quality-assured at all the levels;
10. Develop a strategy for investment in research infrastructure;
11. Encourage research in indigenous knowledge systems (IKS) and promote technology transfer initiatives.

4.3.2 Institutional Involvement in R&D

1. Establish and strengthen research committees in higher education institutions;
2. Encourage students and trainees to embark on field research (on-site and hands-on experiences) at the relevant locations and centres.

4.3.3 Making Research Relevant to the Needs of The Gambia

1. Sustain and improve agriculture-related research competencies in order to raise the productivity of crops, livestock, poultry and fish resources as well as promote research on medicinal and other valuable crops, especially those linked to indigenous knowledge;

2. Sustain and improve research in health, education and energy as well as other areas of national development;
3. Encourage R&D activities that develop technologies through linkages with industries.

4.4 Science, Technology and Innovation

The NSTI Policy is formulated to complement the Tertiary and Higher Education Policy in order to harness the nation's total high and middle-level human resource base for the realisation of The Gambia's national development objectives and aspirations. With this in view, the strategies specific to STI in this policy are classified into short, medium and long term. To implement these strategies, MoHERST will work very closely with all the tertiary and higher education institutions to contribute to the effective infusion of STI in the national economic framework.

4.4.1 Short-Term Strategies

In the short term, MoHERST, in collaboration with other stakeholders will restructure the entire STI machinery, infrastructure and programmes in order to make them more responsive to the national needs and priorities. To achieve this, emphasis will be placed on:

1. Training of teachers of science for the basic, secondary and tertiary levels of the education system;
2. Promoting the training of a critical mass of middle-level technical personnel to address the provision of basic needs, such as food, shelter, health, clothing and energy;
3. Acquiring skills in the use of high technologies, such as in the areas of ICT, biotechnology and nanotechnology, and integrating their application in the day-to-day work and activities of the citizenry;
4. Reviewing the curricula at tertiary and higher education levels to support STI goals and objectives.

4.4.2 Medium-Term Strategy

In the medium term, the strategy is to accelerate the promotion of innovation through the development and utilisation of modern scientific and technological capabilities to provide the basic needs for the citizenry and to compete in the global market.

In addition to this is the strategy to promote applied research and application of new technologies, including safe biotechnology, which holds much potential for increasing agricultural productivity.

4.4.3 Long-Term Strategies

In the long term, the main strategies are to create:

1. Indigenous science and technology capacities that are appropriate to national needs, priorities and resources;
2. A science and technology culture, whereby solutions to socio-cultural and economic challenges of individuals, communities and the nation are recognised and tackled within the domain of STI.

Linked to the overall strategies highlighted above are the following specific strategies:

1. Promoting postgraduate education in scientific disciplines, targeting 15% of the student population in the institutions enrolling at the postgraduate level;
2. Creating special incentives in the form of scholarships and/or stipends for students and graduates, especially female candidates, involved in science and technology;
3. Creating students' soft loans for STI-based programmes;
4. Improving science education at all the levels, particularly in all tertiary and higher education and TVET institutions;
5. Promoting enrolment in TVET to enhance the middle-level management of science and technology application and service delivery in all the sectors;
6. Promoting science and technology innovation within the education system;

7. Increasing the country's capacity to train personnel in the emerging technologies, such as biotechnology, nanotechnology and material sciences;
8. Using the mass media to popularise/promote STI;
9. Identifying skills gaps in STI emerging technologies through regular reviews;
10. Laying more emphasis on industrial attachment for students.

4.5 Sector Management

The strategies listed below will be implemented to achieve the policy pronouncements and objectives for sector management.

4.5.1 Improvement of Quality

1. Prepare codes of practice on educational criteria and quality standards for higher education in The Gambia as requirements for registration and accreditation, and to monitor compliance;
2. Develop mechanisms to review institutional data relating to quality;
3. Set up regulatory bodies, such as the AQAA, to establish guidelines and quality assurance frameworks;
4. Require the AQAA to oversee the quality assurance and accreditation of all the institutions and programmes;
5. Set up and implement a Performance Management System to ensure efficiency and effectiveness in the operations of the sector.

4.5.2 The Labour Market

1. Strengthen the labour-market information system in the sector;
2. Review and revise the curricula to ensure their relevance to labour market needs;
3. Conduct a national skills gap and needs assessment collaboratively with the relevant private and public sector partners;

4. Integrate the following institutions into the UTG in phases:
 - GC, GTTI, NARI and MDI;
5. Support and facilitate the integration process;
6. Develop and promote internationalised curricula and exchange programmes to enhance the mobility of students and international collaboration in teaching and learning;
7. Provide guidelines and procedures for the submission of quarterly and annual reports to MoHERST from all the institutions;
8. Organise working forums to review quarterly reports of the institutions;
9. Develop a format for data collection to ensure consistency across the system and establish an internet-based database;
10. Conduct regular performance monitoring to ensure the adherence to policies and procedures;
11. Develop and maintain a comprehensive databank on the human resources in the institutions.

4.5.3 The Internal Management of MoHERST

1. MoHERST will increase its visibility and effectiveness in all the administrative regions to meet national needs;
 2. Develop and establish a Higher Education Management Information System (HEMIS) to assist in the management of the sector;
 3. Develop an outward-looking policy review and analysis function to provide advice to the Ministry;
 4. Recruit appropriate specialists for new and existing functions within the Ministry to ensure effective policy implementation;
 5. Strengthen the technical and administrative structures within the Ministry and establish a harmonised reporting and monitoring system;
-

6. Work with the Ministry of Finance and Economic Affairs (MoFEA) to develop a performance-based funding system for the sector.

4.5.4 Technical and Vocational Education and Training

1. Operate and/or facilitate the provision of seed money for TVET graduates;
2. Encourage banks and other financiers to provide long-term loans to TVET graduates.

5. SUSTAINABILITY AND FUNDING MECHANISM

Given the prevailing economic and social environment of the country, sustainable funding for tertiary and higher education is critical in the attainment of the policy objectives set out in this document. In this regard, an appropriate funding model that will be responsive to the local needs and environment will be premised on the following:

- a) Unit cost allocation by subject, student, level and mode of study
- b) Teaching resource allocations based on subject and level
- c) Input allocations based on enrolment targets
- d) Monthly government allocations to the institutions based on number and status of staff.

Achieving the sector's targets will require much bigger investments in the sector. Tuition fees already provide as much as 60% of the income at UTG, which is one of the highest in any public-funded institution in the sub-region.

It is recognised that public funds alone cannot meet all the demands of the policy, as tertiary and higher education is generally very expensive. In the context of inadequate resources, as characterised by the Gambian situation, using a funding model based on unit cost per student and unit cost per programme, the following sustainability and funding strategies will be implemented for the achievement of the policy pronouncements:

1. Maximising the use of locally and externally mobilised resources by Government;
2. Reviewing and expanding the current education levy to include tertiary and higher education institutions;
3. Devising tax exemption initiatives for those contributing to the funding of the sector in the country;
4. Institutionalising performance-based systems for budgetary allocation both to and within the institutions;

5. Soliciting strong linkages with both domestic and international partners to support projects, including research projects and education provision;
6. Encouraging all the institutions to develop corporate plans, and innovative financing and other resource mobilisation mechanisms to supplement their budgetary allocations;
7. Establishing strong partnerships with financial and other relevant institutions in order to provide a sustainable students' loan scheme to increase access to education in this sector.

In addition to these strategies, domestic financial resources, mainly from Government, will be gradually mobilised to increase the current allocation in accordance with research and development needs. Furthermore, efforts will be made for additional resources to be generated from research activities in order to sustain interventions in this area. However, given the quantum of resources needed to develop the research infrastructure, additional support will have to be sought from external development partners.

6. CONCLUSION

This Policy shows how Government, in collaboration with all the relevant stakeholders and development partners, will develop a sustainable funding mechanism in order to establish a robust system for tertiary and higher education. If the constraining risks are mitigated and the policy objectives are achieved, by 2023, a larger proportion of young people should be enjoying quality tertiary and higher education in more institutions than exist at present.

The Policy is also designed to result in greater access to education for a wider range of students, with the female participation rates in tertiary and higher education increasing significantly. In tandem with these will be the provision of quality education benchmarked against international standards. Of great import are the reforms that will be introduced and the much-needed emphasis on science, technology and innovation. To catch up with the scientific world and economic giants, the necessary technically skilled and highly professional human resource base has to be developed and supported by the prerequisite infrastructure and technologies.

The Gambia will have to rise to the ranks of its international partners and step up its production and productivity capabilities. However, the opportunity to realise all these may be lost in the absence of the corresponding investments.

The indication is that the present level of funding for tertiary and higher education in The Gambia is comparatively inadequate and needs to be increased. Therefore, it suffices to conclude that realistic as this policy appears to be, its successful implementation depends, to a considerable degree, on injecting strategically-targeted investments into the tertiary and higher education system. The policy provides a justification for such investments.