THE UNITED REPUBLIC OF TANZANIA

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

NATIONAL GUIDELINE TO IDENTIFY AND PROMOTE INVENTIONS, INNOVATIONS AND TRADITIONAL KNOWLEDGE PRACTICES

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FOREWORD

Innovation and invention have become a crucial issue in today's economy for sustainable development. Countries such as China, Korea, USA and Japan have made advancements in terms of sustainable socio-economic development mainly due to heavy investment in this area. Innovation and invention do not arise automatically; they are generated and sustained through well-coordinated national efforts.

Innovation and invention cannot be legislated, nor brought about by edict, but comes from individuals and from creative and interactive communities. Innovations are not made only in high tech institutions; these also evolve in the 'laboratories of life', at the grassroots level by individuals as well as communities. The Government of the United Republic of Tanzania (URT) is, therefore, committed towards creating supportive environment for innovations and inventions as well as for traditional knowledge practices. Motivation of innovators, inventors and traditional knowledge holders at this particular point is highly required so that Tanzania can benefit out of this field. In an innovative society, individuals, groups, organizations, government and Parliament recognize that they are partners, rather than opponents, controllers or contenders. The idea of networking, collaboration and common purpose is very important.

I am, therefore, availing to the people of the URT the Guideline to Identify and Promote Inventions, Innovations and Traditional Knowledge Practices (2018). I call upon all stakeholders to utilize these guidelines in dealing with inventors, innovators and traditional knowledge holders in Tanzania. These guidelines should be used in developing appropriate and rational mechanisms based on the information contained herein. The Government on its part will continue to support efforts directed towards inventions, innovations and traditional knowledge practices for the benefit of this country.

Finally, I note with satisfaction that a number of individuals and institutions with different mandates and expertise have been involved in the development of this guidelines document. Your contribution is highly valued.

Prof. Joyce Lazaro Ndalichako (MP)

MINISTER FOR EDUCATION, SCIENCE AND TECHNOLOGY

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Last, but not least, contribution of those who participated in stakeholders workshops to develop the document and of those who provided editorial work and took part in the review, amendments and typesetting is highly treasured.

Dr. Leonard D. Akwilapo
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LIST OF ABBREVIATIONS

ARIPO	African Regional Intellectual Property Organization
ARIs	Agricultural Research Institutes
ARU	Ardhi University
ATC	Arusha Technical College
ATPS	African Technology Policy Studies Network (ATPS)
BPRA	Zanzibar Business and Property Registration Agency
BRELA	Business Registrations and Licensing Agency
CAMARTEC	Centre for Agriculture Mechanization and Rural Technology
CBE	College of Business Education
CDTT	Centre for the Development and Transfer of Technology
CoET	College of Engineering and Technology
COSOTA	Copyright Society of Tanzania
COSOZA	Copyright Society of Zanzibar
COSTECH	Tanzania Commission for Science and Technology
CTI	Confederation of Tanzania Industries
DIT	Dar es Salaam Institute of Technology
DST	Directorate of Science and Technology
DUS	Distinctness Uniformity and Stability
FDCs	Folk Development Colleges
HEI	Higher Education Institutions
HIDF	Human Development Innovation Fund
I&I	Invention and Innovation
IFIA	International Federation of Innovators Associations

IFM	Institute of Financial Management
IPR	Intellectual Property Rights
ITM	Institute of Traditional Medicine
LAT	Leather Association of Tanzania
LGA	Local Government Authority
LR	Local Research
MDGs	Millennium Development Goals
MoEST	Ministry of Education, Science and Technology
MUHAS	Muhimbili University of Allied Sciences
MUST	Mbeya University of Science and Technology
MVIWATA	Mtandao wa Vikundi vya Wakulima Tanzania
NAEM	National Award for Environmental Management
NARST	National Award for Research in Science and Technology
NEMC	National Environment Management Council
NFAST	National Funds for Advancement of Science and Technology
NGOs	Non-Governmental Organizations
NHBRA	National Housing and Building Research Agency
NIMRI	Tanzania National Institute for Medical Research
NM-AIST	Nelson Mandela African Institute of Science and Technology
OAPI	Organisation Africaine de la Propriété Intellectuelle
PBR	Plant Breeders' Rights
R&D	Research and Development
S&T	Science and Technology

SACCOS	Savings and Credit Co-Operative Society
SIDA	Swedish International Development Agency
SIDO	Small Industries Development Organization
SME	Small and Medium Enterprise
SSA	School Science Awards
STI	Science, Technology and Innovation
STIPRO	Science, Technology and Innovation Policy Research Organization
SUA	Sokoine University of Agriculture
TACRI	Tanzania Coffee Research Institute
TAEC	Tanzania Atomic Energy Commission
TAI	Tanzania Association of Inventor/innovators
TAREA	Tanzania Renewable Energy Association
TARI	Tanzania Agricultural Research Institute
TASTA	Tanzania Science and Technology Award
TATC	Tanzania Automotive Technology Centre's
TaTEDO	Tanzania Traditional Energy Development and Environment Organization
TBS	Tanzania Bureau of Standards
TCCIA	Tanzania Chambers of Commerce, Industry and Agriculture
TCRA	Tanzania Communications Regulatory Authority
TCU	Tanzania Commission of Universities
TDTC	Technology Development and Transfer Centre
TEMDO	Tanzania Engineering Manufacturing and Design Organisation

TFDA	Tanzania Food and Drug Authority
TFNC	Tanzania Food and Nutrition Centre
TIC	Tanzania Investment Centre
TIPASIC	Tanzania Intellectual Property Advisory Services and Information Centre
TIRDO	Tanzania Industrial Research and Development Organization
TISCs	Technology and Innovation Support Centers
TK	Traditional Knowledge
TOSCI	Tanzania Official Seed Certification Institute
TPRI	Tropical Pesticides Research Institute
TTO	Technology Transfer Office
UDEC	University of Dar es Salaam Entrepreneurship Centre
UDOM	University of Dodoma
UDSM	University of Dar es salaam
UNCTAD	Tanzania United Nations Trade Cluster Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNIDO	United Nation Industrial Development Organization
UNIDO	United Nations Industrial Development Organization
VETA	Vocational Education Training Authority
VIBINDO	Jumuiya ya Vikundi vya Wenye Viwanda na Biashara Ndogondogo
VICOBA	Village Community Banks
WIPO	World Intellectual Property Organization
WTF	Working Tool Form

PART ONE

1.0 GENERAL PROVISIONS

1.1 BASIC DEFINITIONS

For the purpose of this guidelines document, the following terms related to inventions and innovations shall have the following meaning:

Innovation

Innovation is the process of translating an idea or invention into a good or service that creates value for which customers will pay. It may be in the form of new or improved products, new or improved services, or new organizational and managerial measures.

Grassroots Innovation

Grassroots innovation is an innovation from unaided, unqualified, untrained individual innovator from informal sector, who has developed a solution to technical, environmental and socio-economic problem.

Traditional Knowledge

The term traditional knowledge refers to the content or substance of knowledge resulting from intellectual activity in a traditional context, and includes the know-how, skills, innovations, practices and learning that form part of traditional knowledge systems and knowledge embodying traditional lifestyles of indigenous and local communities, or contained in codified knowledge systems passed between generations. It is not limited to any specific technical field and may include

agricultural, environmental and medicinal knowledge, and knowledge associated with genetic resources[1]

Invention

An invention can be a product or process that provides a new way of doing something or offers a new solution to a technical problem.

Intellectual property

Intellectual property is a property in intangible form such as creative works, inventions, signs and information. Intellectual property is distinct from the tangible objects in which it is embedded.

Patent

A patent is an exclusive right granted for an invention in a given territory for a limited period, generally 20 years, after this period an invention enters into the public domain. For an invention to be patented it must be: Industrially applicable (useful), new (novel), and of a sufficient "inventive step".

[1] *Sarombe, A. (2009) "Intellectual property law protection for traditional knowledge/indigenous knowledge systems in Southern Africa and selected Asian jurisdictions- A view from developing and least developing countries". Paper presented at the KM Africa, Conference, 2009, Dakar: Senegal.*

Copyright

Copyright is a legal term describing right given to creators for their literary and artistic works (including computer software). Related rights are granted to performing artists, producers of sound recordings and broadcasting organizations for their radios and television programme. The period of protection is the lifetime of the creator and 50 years after his/her death.

1.2 SCOPE OF THE GUIDELINES

These guidelines apply to innovations, inventions and traditional knowledge practices developed by individuals at grassroots level and non-grassroots level as well as by institutions in the United Republic of Tanzania. It should not be interpreted that these guidelines are replacing any existing policies or legislation. They should be seen as complementing national policies and legislation. Where gaps exist, these guidelines could be a useful input in reviewing, revisions and improving such policies and legislation. These guidelines may serve in developing, drafting or revising legislative, administrative or policy measures relating to the development, promotion and commercialization of inventions, innovations and traditional knowledge practices in Tanzania. This guidelines document will be reviewed, revised and improved as more experience is gained in management of inventions, innovations and traditional knowledge practices.

PART TWO

2.0 BACKGROUND

This part explains the innovation, the objectives of the guidelines and rationale of the guidelines.

2.1 Introduction

Today technology has been an important resource for development and a source for competitiveness of both production and service sector. There are two ways of acquiring the needed technology either through innovation or through technology transfer. An innovation may be breakthrough or incremental, and it may be achieved by:

- Introducing new or improved goods or services and/or
- Implementing new or improved operational processes and/or
- Implementing new or improved organizational/managerial processes.

These are geared towards improvement of market share, competitiveness and quality, while reducing costs. The acquisition through innovation, invention or traditional knowledge practice needs to be guided in order to achieve maximum benefit from them, hence a need for a guideline.

The guidelines for the identification and promotion of invention, innovation and traditional knowledge practices are of paramount importance to the smooth operation and assistance for inventors, innovators and traditional knowledge holders. These guidelines will be

used as directives for effective implementation, monitoring and evaluation of issues related to inventions, innovations and traditional knowledge practices so that they stimulate, encourage, and assist inventors, innovators and traditional knowledge holders; entrepreneurs; and innovative groups in the development and commercialization of new inventions, innovations and traditional knowledge practices. Not only that, but also it can facilitate considerably the successful application and commercialization of inventions and technology arising from Research and Development (R&D) institutions, Universities, individual inventor, innovator and traditional knowledge holder as well as Small and Medium Enterprises (SMEs).

Development in Science and Technology is dependent solely on how innovations are being developed and utilized. The Government has formulated the National Science and Technology Policy, 1996, which requires instituting a mechanism for identification, promotion and development of special talents and aptitudes in STI among Tanzanians especially youths in order to benefit from the rich tapestry of human intellectual capabilities necessary for national development. This policy is currently under review to get the STI policy where innovation is also featuring in the policy document.

In the Vision 2025 the Government emphasizes stimulation and promotion of a science culture and the culture of technological innovation in the society (Planning Commission, 2000). There is a great need to institute guidelines and programs for identification, validation, recognition, development and promotion of local inventions, innovations and traditional knowledge practices in the country in order to encourage creativity as well as innovativeness in the Tanzanian community.

These guidelines were developed by taking into account the situational analysis of technological activities in Tanzania, the mandates of relevant government and non- government authorities and the need to develop and make best use of invention-, innovation- and traditional knowledge practice capability of Tanzanians.

These guidelines are aimed at guiding the Government on how to assist the inventors, innovators and traditional knowledge holders on the steps and procedures, which they have to follow in the development of their inventions, innovations and traditional knowledge practices. The starting point will be at COSTECH through the Centre for Technology Development and Technology Transfer (CTDT) as well as relevant ministries, institutions and local government offices. MoEST shall sensitize the utilization of these guidelines as well as the STI policy.

The focus of these guidelines is to guide the Government on the best modalities for supporting such potential inventors, innovators and traditional knowledge holders in the country so that their inventions, innovations and traditional knowledge practices could contribute to the socio-economic development of the Tanzania.

2.2 Objectives

2.2.1 Main objective

To provide procedures and guidelines on how the Government will deal with identification and promotion of inventions, innovations and traditional knowledge practices from academia, Public and Private Institutions and individuals at all levels in Tanzania, including grassroots innovations, non-grassroots innovations and traditional knowledge practices.

2.2.2 Specific objectives

These guidelines are intended to:

- Provide procedures to be followed by the Government when assisting inventors, innovators and traditional knowledge holders on soliciting technical and financial support to develop, promote, protect (IP Issues) and commercialize their ideas and products could be assisted;

- Outline key roles for each stakeholder involved in the process of protecting, promoting and commercializing inventions, innovations and traditional knowledge practices;
- Establish a database of inventions, innovations and traditional knowledge practices in the country; and
- Outline linkages among stakeholders involved in promotion of inventions, innovations and traditional knowledge practices.

These guidelines shall:

a. Provide guidance to inventors, innovators and traditional knowledge holders on where to start and how to go further, so that they can benefit from services offered by various institutions with minimum time and cost possible;
b. Assist the inventors, innovators and traditional knowledge holders by putting "science" in their inventions through linking them to relevant technology institution and protect their inventions, innovations through IPR;
c. Compliment other program elsewhere in the promotion of inventors, innovators and traditional knowledge holders;
d. Encourage inventors, innovators and traditional knowledge holders to protect and publicize their work;
e. Enable various institutions dealing with inventions, innovations and traditional knowledge practices to contribute in the process of

promoting the same in the country without duplication of efforts; and

f. Enhance monitoring and evaluation of the inventors, innovators and traditional knowledge holders as well as institutions involved.

2.3. Rationale for Guidelines of Identification and Promotion of Inventions, Innovations and Traditional Knowledge Practices

Inventions and innovations take place not only in formal laboratories and educational institutions, but also from individual innovators and inventors at all levels including grassroots level (life laboratories). This applies also to traditional knowledge practices. Currently, there is no institutional framework to guide the Government on best practices to assist inventor(s), innovator(s) and traditional knowledge holders on development and promotion of their innovations, inventions and traditional knowledge practices. This is more so important especially for the 75% of the Tanzanians living in rural areas whereby a significant number of innovations are developed. Such innovations, inventions and traditional knowledge practices are localized and no efforts have been made to promote them and disseminate them to other parts of the country for the socio-economic development. Apart from the innovators, inventor or traditional knowledge holders themselves, neither individuals nor institutions care for such inventions, innovations or/and traditional knowledge practices. From the nature of these innovations, most of which are simple and cheap, if promoted and used by a good

number of SMEs and households, they may contribute in the reduction for drudgery, job creation, income generation, and thus alleviation of poverty. In promoting them, also they could contribute to the social economic development of the country.

PART THREE

3.0 NATIONAL GUIDELINES FOR IDENTIFICATION AND PROMOTION OF INVENTIONS, INNOVATIONS AND TRADITIONAL KNOWLEDGE PRACTICES IN TANZANIA

3.1 FUNCTIONS OF THE GUIDELINES

The nature and extent of invention, innovation and traditional knowledge practices, and how best to achieve and manage these processes, is a rapidly developing issue. It is a matter of increasing concern to Policy makers, Politicians, Public servants, Private sector and those in civil society. Guiding innovation, invention and traditional knowledge practices coupled with a parallel commitment to excellence and innovation in how the Government could deliver best services to the Tanzanian community is among the essential functions of these guidelines.

The larger challenges still lie ahead, and that is to move forward with an intention to make innovations, inventions and traditional knowledge practices contribute highly to socio-economic development of this country. To achieve this, the guidelines shall:

1. Provide high quality, forward-looking procedures for identifying and handling of inventions, innovations and traditional knowledge practices;
2. Direct on matters relating to commercialization of inventions, innovations and traditional knowledge practices;

3. Provide provisions for value addition, research and development, protection as well as business development for innovations, inventions and traditional knowledge practices;
4. Maintain a culture of honesty, impartiality and fairness, in evaluation and retaining public trust on promoting inventions, innovations and traditional knowledge practices;
5. Provide flexible institutional framework that respond to changing realities and government priorities; and
6. Ensure effectiveness and efficiency in all its operations.

3.2 PROCEDURES FOR IDENTIFYING AND HANDLING OF INVENTIONS

3.2.1 Identification of inventors, innovators and traditional knowledge holders

Means for identification of inventor, innovators and traditional knowledge holders shall comprise of:

a. Use of Local Government Authorities, i.e., Municipals, District Councils and Village Councils;
b. Information sharing among stakeholders: Ministries, R&D institutions, Higher learning institutions, COSTECH, COSOTA, COSOZA, BRELA, BPRA, PBRA, SIDO, VETA, TAI, NGOs, CBOs, Chambers, etc;

c. Scouting and visiting prospective inventors, innovators and traditional knowledge holders in their workplaces for verification and evaluation of their work;
d. Outreach programmes (via mass media, seminars, workshops and exhibitions).
e. Fairs and exhibitions;
f. Self-proclaiming of inventor, innovator and traditional knowledge holders; and
g. Competitions to include children competitions for innovative ideas, competition for grassroots- and non-grassroots innovators competition.

3.2.2 Documentation

Documentation of inventions, innovations and traditional knowledge practices shall be as follows:

a. Identified inventions, innovations and traditional knowledge holders shall be initially recorded at the points of identification by filling Identification of Inventor; Innovators and Traditional Knowledge Holders -Working Tool Form (WTF) 1 as shown in the schedule of working tools of this guide;
b. Before any documentation is done, the innovator, inventor or traditional knowledge holder should fill the Prior Informed Consent (PIC) Form (WTF 2) after he/she has read the Prior Informed Consent (PIC) Explanatory Note (WTF 3);

c. All initial documentation shall be forwarded to COSTECH for further action-prior-art-search to ascertain the novelty and relative uniqueness or comparative advantage of the invention, innovation or traditional knowledge practice;
d. Once the entry is accepted, the inventor, innovators or traditional knowledge holder shall register their inventions, innovations and traditional knowledge practices at COSTECH by filling the confidentiality information disclosure –Working Tool Form (WTF) 4;
e. If the entry is not acceptable as it has been found to be in the public domain, then it will be stored in the database as public domain knowledge; and
f. The accepted innovations, inventions and traditional knowledge practices should be processed further through the Value Addition, Research and Development (VARD), Business Development (BD) and Dissemination and Social Diffusion (DSD).

3.2.3 Information Dissemination on the Guidelines

These guidelines shall be available at all levels of Government hierarchy that is from Central Government to Local Government and disseminated to the public. COSTECH in collaboration with MoEST shall prepare brochures both in English and Kiswahili to popularize these guidelines. Mass media, Fairs, Workshops and Seminars shall be used to disseminate and popularize information on these guidelines and inform inventors and innovators as well as traditional knowledge holders on the

procedures to follow for protection (IP), value addition and research & development, commercialization, business development and promotion of their inventions, innovations and traditional knowledge practices.

3.2.4 Innovation and Invention Management Systems

Inventions, Innovations and Traditional Knowledge Practices Data Base Management Systems shall be established by COSTECH, which shall be responsible for:

a. Registration of the approved invention, innovation and traditional knowledge practice into the database;
b. Updating the database on the development, commercialization, business development and promotion of the approved inventions, innovations and traditional knowledge practices;
c. Dissemination of database information will be at the COSTECH website with links to other websites; and
d. Promotion of the database so as to get users of the information contained therein.

3.2.5 Technical Assistance

The Government, through COSTECH will provide to inventors, innovators and traditional knowledge holders technical assistance in evaluating their inventions, innovations and traditional knowledge practice. Technical assistance may include:

a. Evaluation of the inventions, innovations and traditional knowledge practices through prior-art searches;

b. Identification of relevant institution(s) to support the development of their inventions, innovations and traditional knowledge practices (Value addition, research and development; business development and dissemination as well as social diffusion);
c. Availing patent information of similar invention, innovations and traditional knowledge practices in making use of existing patents documents;
d. Linking inventors, innovators and traditional knowledge holders to venture capital as well as to financial institutions;
e. Incubation of the innovations, inventions and traditional knowledge practices in situ or in an incubator; and
f. Licensing of the innovations, inventions and traditional knowledge practices.

3.2.6 Protection and Registration

The Government will also provide the assistance for protection of the inventions, innovations and traditional knowledge practices in the following areas:

a. Identification of claims and inventive steps of the innovations, inventions and traditional knowledge practices. Assistance could be sought from COSTECH;
b. Preparation of protection application documents and filing of the patent application at BRELA and BPRA, Plant Breeders Right (PBR) applications at the PBR registrar and copyright protection at COSOTA and COSOZA with the close assistance of the

innovators, inventors and TK practise holders. For the patent application assistance could be sought from COSTECH. PBR and copyright the innovator is already having the innovation in a tangible form (e.g. a book, a CD, etc.);

c. Preparations of agreements (licensing, outright sales) with inventors, innovators and traditional knowledge holders; and relevant entity if the need arises. Assistance could be sought from the institutions dealing with legal affairs. Ministry of Legal and Constitution Affairs, Courts, etc; and
d. Interpretation of terms and conditions included in different instruments.

3.2.7 Prototype Development

Inventions, innovations and traditional knowledge practices shall be categorized as:

i. Engineering/physical science based-;
ii. Abstract based-;
iii. Life science-based; and
iv. Others.

COSTECH shall identify institutions to be linked with inventor, innovators and traditional knowledge holders depending on their category.

3.2.7.1. Engineering-Based Category

COSTECH shall identify and select relevant institution(s) to undertake the preparation of engineering drawings, fabrication and testing of the prototypes. The original sketches of the invention or innovation or traditional knowledge practice shall be preserved and documented to maintain originality or novelty of the invention or innovation or traditional knowledge practice.

Whenever possible, cost sharing among inventor, innovator or traditional knowledge practices; development partner; and private sector shall be sought. COSTECH shall establish a Network of Fabricators. The fabrication and testing report shall be submitted to COSTECH for up-scaling considerations.

3.2.7.2. Abstract Based Category

COSTECH shall receive the works such as computer programs, literal & artistic works, etc., and shall forward them to COSOTA for registration and protection. Considerations will be made for their further development and commercialization.

3.2.7.3. Life Sciences Based Category

This will include:

a. Traditional medicine;
b. Plants and animal Breeding;
c. Biotechnology/Genetic Engineering; and
d. Pharmaceuticals.

COSTECH shall channel these inventions, innovations and traditional knowledge practices to relevant institution(s) for evaluation and validation. This shall include all R&D and Higher learning Institutions. COSTECH shall establish a Network of Institutions, Scientists, Engineers and Technologists for these activities.

3.2.7.4. Other Categories

This shall include any other category, which does not fall under Engineering/Physical or Life Sciences or Abstract category. COSTECH should handle them accordingly.

The procedures for identifying and handling of the inventions, innovations and traditional knowledge practices are diagrammatically presented in Appendix 1.

3.3 COMMERCIALIZATION OF INVENTIONS/INNOVATIONS/TK PRACTICES

Inventions, innovations and traditional knowledge practices become very useful when they could be marketed, put in use or commercialized. In these respect inventors, innovators or traditional knowledge holders shall bear in mind that it is equally important to develop a strategy to bring the products to market as it is for transforming the idea into a product or process. Therefore, successful commercialization of inventions, innovations and traditional knowledge practices shall require a strict attention to multiple lines of thinking including focus on technical, market and business development.

The Government through COSTECH will assist in building capacity of Inventors, innovators and traditional knowledge practices in the process of creating a marketing strategy by making objective market assessment from early stages of transforming a new idea into an invention. The aim shall be to help inventors, innovators and traditional knowledge holders understand among other things, how new products are received by customers and the level that might be possible.

In this respect, the Government shall assist inventors, innovators and traditional knowledge holders in considering a number of commercial and marketing options including the following:

a. Establishing inventor, innovators and traditional knowledge holders own company;
b. Selling patent rights or any other intellectual property rights (IPR);
c. Licensing of intellectual property rights;
d. Joint venture or collaboration (partnership);
e. Science parks and business incubators (spin-offs);
f. University companies; and
g. Franchising.

However, many inventors, innovators and traditional knowledge holders are not good entrepreneurs and do not have capital resources and at the same time R&D institutions cannot effectively engage in commercial activities. In this case innovators, inventors and traditional knowledge

holders as well as R&D institutions should be guided in developing business out of their innovations, inventions and traditional knowledge practices. Therefore, COSTECH and other technology transfer offices shall advise the inventor, innovators and TK holders on the most appropriate options for commercializing invention, innovation and TK practice at the same time encouraging inventor, innovators and TK holders to focus more on further development of inventions where they have more comparative advantage. It may assist the inventor, innovators and TK holders to develop businesses and enterprises and link them to venture/risk funds.

COSTECH shall coordinate the establishment of science parks, business incubators and/or university companies (spin-offs) to help the process of bringing products of inventions into the market as well as establish an Innovation Venture Capital Fund to be able to hasten the speed of commercialization of inventions, innovations and traditional knowledge practices.

Inventors, innovators and traditional knowledge holders should be assisted to build a value chain around their inventions, innovations and traditional knowledge practices to facilitate their transition into self-supporting sustainable enterprises. The goal is to make these innovative products available to the society through market mechanisms or otherwise. The inventors, innovators and traditional knowledge holders need to be connected to enterprises, which could help them flourish.

This could be through technology licensing or through funding to establish own enterprises.

3.4 DISSEMINATION AND SOCIAL DIFFUSION

There are some innovations which may not have the potential of widespread commercialization but can enhance social wealth, improve people's lifestyles and facilitate sustainable alternatives for development. These could be termed as open source that anybody can adopt as per his/her need without any payment. In such a situation, innovators may be asked to generously declare their innovations open source so that society at large can benefit from them. The Government shall disseminate such technologies to a wide population as that they could contribute to the socio-economic development.

3.5 TOOLS FOR EVALUATION OF INNOVATIONS, INVENTIONS AND TRADITIONAL KNOWLEDGE PRACTICES

There shall be tools for evaluation of inventions, innovations and traditional knowledge practices. These will include identification forms, prior informed consent forms and explanatory note, confidentiality disclosure forms, special inventor/innovator/TK holder assessment forms, and experts' assessment and evaluation forms. These will be used for evaluation and assessment of innovations, inventions and traditional knowledge practices**.**

3.5.1 Inventor/Innovator/TK holder Identification Form (WTF 1)

Inventors, innovator and traditional knowledge holders shall be required to fill in form number WTF 1 at the point of identification as provided in Schedule of Working Tools.

3.5.2 Prior Informed Consent (PIC) Form (WTF 2)

This form should be filled by the innovators, inventors or traditional knowledge holders to ensure that he/she understands the consequences which may arise in handling his/her innovation, invention or traditional knowledge practice. This will also provide his/her permission on to what extent dissemination of the information about his/her invention could be disseminated to third parties**.**

3.5.3 Prior Informed Consent Explanatory Note (WTF 3)

Before the inventor, innovator or traditional knowledge holder fills the PIC form-WTF 2, he/she should read the explanatory note so that he/she understands the consequences and implications resulting from the PIC form.

3.5.4 Confidentiality Information Disclosure Form (WTF 4)

Inventor, Innovator and traditional knowledge holders shall be required to disclose their inventions after being approved in self-evaluation stage by filling the Confidentiality Information Disclosure Form- (WTF 4) between him/ her self and COSTECH as provided in the Schedule of Working Tools.

3.5.5 Assessment of Invention/Innovation/TK Practice (WFT 5)

The assessment of invention, innovation or traditional knowledge practice Form-WTF 5 will be filled in order to make an objective judgment about the innovation, invention or traditional knowledge practice and advice the inventor, innovator or traditional knowledge holder accordingly after the disclosure of the invention, innovation or traditional knowledge practice. The form is provided in the Schedule of Working Tools.

3.5.6 Experts' Evaluation and Assessment of Inventions, Innovations or Traditional Knowledge Practice (WTF 6)

Upon completion of the assessment process, a team of experts in the relevant field will be convened to evaluate further the invention, innovation or the traditional knowledge practice and suggest the way forward. These experts will be required to fill in the Experts' Evaluation and Assessment Form-Working Tool Form (WTF 6). The form is provided in the Schedule of Working Tools.

PART FOUR

4.0 ROLES OF RELEVANT INSTITUTIONS

Different institutions shall have different roles in the support, development and promotion of innovations, inventions and TK practices in Tanzania. The following institutions shall have different responsibilities: MoEST, COSTECH, R&D Institutions, SIDO, VETA, BRELA, BPRA, TAI, COSOTA, COSOZA and MA Plant Breeders Registry as well as the innovator, inventor or TK holder.

4.1 Ministry of Education, Science and Technology (MoEST)

The roles of MoEST which are relevant to inventions shall be:

a. To formulate and review policies and guidelines which are relevant to innovations and inventions;
b. To develop national Strategic Plan for innovation and invention;
c. To establish Science Technology and Innovation (STI) promotion Act;
d. To participate in the development of National Intellectual Property Policy for invention.
e. To facilitate the implementation of the Innovation Guidelines;
f. To receive reports on invention in the different stages of development and promotion from COSTECH;
g. To receive reports on the protection status of inventions initiated through COSTECH; and
h. To provide funding for development of inventions.

4.2 Tanzania Commission for Science and Technology (COSTECH)

The roles of COSTECH among others will be:

a. To act as an implementing organ and advisor to the Government on issues related to Policies and Guidelines of inventions innovation and TK practices;
b. To provide incentives to inventor/innovators such as awards, sponsorship to exhibition, conferences, skills development or further training;
c. To maintain registry of inventions and establish a database and a portal thereof;
d. To facilitate promotion of Technologies;
e. To facilitate the promotion and popularization of matters related to invention through science parks, incubator, clusters, exhibition, media, etc;
f. To facilitate capacity building on innovation and invention related matter such as IP, entrepreneurship, marketing and commercialization;
g. To monitor technology transfer of the approved Invention; and
h. To sensitize Tanzanians to inculcate innovative culture.

4.3 Ministry of Industry, Trade and Investment (MITI)

The roles for MITI include:

a. To formulate National IP Policy and its implementation guidelines;
b. Promotion of establishment of Small and Medium Industry; and

c. Provide assistance in establishment innovative clusters.

4.4 Business Registrations and Licensing Agency (BRELA)

Under BRELA, the following are the identified roles:

a. To protect innovations and inventions and TK practices through granting of patent, utility models, trademarks as per the Laws;
b. To register business starts up emanating from inventions innovation and TK practices; and
c. To facilitate publicity of their works through exhibition (Intellectual Property and Technology Day).

4.5 Business and Property Registrations Authority (BPRA)

Under BPRA, the following are the identified roles:

a. To protect innovations and inventions and TK practices through granting of patent, utility models, trademarks as per the Laws;
b. To register business starts up emanating from inventions innovation and TK practices; and
c. To facilitate publicity of their works through exhibition (Intellectual Property and Technology Day).

4.6 Small Industries Development Organization (SIDO)

SIDO's engagement in this respect will include:

a. To promote the development of small industries based on innovations and inventions and TK practices from within Tanzania;

b. To provide technical assistance, management and consultancy services to innovators and inventor/innovators in Tanzania;
c. To participate in the prototype development for successful innovators and inventions and TK practices;
d. To provide entrepreneurship, technical and business management skills To provide business opportunities, economic information and advisory services and TK holders;
e. To establish marketing linkages and promotion between inventor/innovators and SMEs;
f. To provide credit and financial guarantee services;
g. To provide business and technology incubation services for inventor/innovators; and
h. To sensitize Tanzanians to participate in innovating/inventing for economic development.

4.7 Copyright Society of Tanzania (COSOTA) and Copyright Society of Zanzibar (COSOZA)

COSOTA and COSOZA will have the following roles:

a. To promote and protect literary, artistic and scientific works;
b. To register copyright works, productions and publicize them nationally and internationally;
c. To educate copyright creators, government enforcement institutions and the general public on copyright and neighboring rights matters;

d. To access, collect and distribute royalties from users of literary and artistic works; and
e. To fight piracy in creative works.

4.8 R&D Institutions

There are a number of R&D Institutions dealing with different areas of specialization. R&D institutions presented in the list presented in chapter eight are potential stakeholders. In regard to inventions, R&D institutions shall have the following roles:

a. To collaborate with COSTECH in development and promotion of invention/innovations TK practices;
b. To improve the inventions in collaboration with inventor/innovator;
c. Provide expert assessment of the invention;
d. Encourage researchers to innovate/invent; and
e. Establish Technology Transfer Office (TTO) or creation of research commercialization centers.

4.9 Higher Learning Institutions (HEI)

HEIs' roles among others will be:

a. As those described for the R&D institutions including;
b. Capacity building for the innovators and inventor/innovators in terms of providing required training;

c. Incorporating some of the innovations/inventions TK practices into students' projects so as to provide scientific knowledge surrounding them; and
d. To inculcate innovative culture by introducing IP and innovation in their training curricular or offer course on the same.

4.10 Vocational Education Training Centers

In respect to innovation, invention or TK practice, Vocational Education Training Centres with their available Workshop facilities shall have the following roles:

a. To collaborate with COSTECH in supporting value addition to inventions, innovations and traditional knowledge practices;
b. Provide technical training to innovators, inventors and TK holders (capacity building);
c. To sensitize Tanzanians to participate in inventing/innovating for economic development; and
d. To link innovators, inventors, TK practices to industry and market.

4.11 Ministry of Agriculture (MA): Plant Breeders Rights

MA holds the Plant Breeders Rights Registrar and therefore has the following roles:

a. The Protection of New Plant Varieties governed by Plant Breeders' Rights, Act, 2002;
b. To maintain register of new plant varieties;

c. To grant plant breeders rights for innovators and inventor/innovators;
d. To disseminate information on plant breeders rights to inventor/innovators;
e. To provide innovators and inventor/innovators with specific guidelines and procedures for conducting validation test; and
f. To facilitate commercialization of the new plant varieties.

4.12 Tanzania Association of Inventors/Innovators (TAI)

TAI shall among others have the following roles**:**

a. To sensitize and drive awareness campaigns to reach out to potential inventors/innovators country-wide;
b. To develop and maintain a dynamic website featuring timetables of fairs and exhibitions, promotion of existing works of inventors/innovators, and a means of feedback to visitors of website;
c. To maintain a monthly newsletter of inventors/innovators;
d. To counsel and guide inventors/innovators follow guidelines so as to benefit from their intellectual property; and
e. To disseminate and promote the use of the National Guidelines for the Promotion of Inventions, Innovations and Traditional Knowledge practices.

4.13 Local Government Authorities (LGAs)

LGAs shall among others have the following roles**:**

a. To sensitize and drive awareness campaigns to reach out to potential inventors/innovators/ traditional knowledge practices holders country-wide;
b. To identify, and inform COSTECH on any new innovation, invention, traditional knowledge practice in their areas; and
c. To provide for conducive environment to harbor innovation, invention, traditional knowledge practice in their respective areas i.e. through providing space for incubators, innovation spaces for fostering socio-economic development of their areas.

4.14 Inventors/Innovators/TK Holders

There are certain roles to be played by these individuals, which include among others:

a. fill the appropriate forms at the relevant stages of processing support for their invention, innovation or TK practice;
b. required to cooperate with institutions identified by COSTECH for development and promotion of their innovation, invention or TK practice or any other institution of their own choice; and
c. required to commercialize their inventions, innovations and TK practices for socio-economic development.

PART FIVE

5.0 FUNDING

The sources of funds for inventions, innovations and traditional knowledge practices development and promotion shall comprise of the following:

- National Fund for the Advancement of Science and Technology (NFAST);
- Operating Cost budget from MoEST and COSTECH;
- Contributions from Private Sector, individuals, Financial Institution; and
- Development Partners and Venture Capital Funds.

These funds will support commercialization of inventions, innovations and traditional knowledge practices.

Private sector will be encouraged to contribute funds in the areas where the innovation will contribute to its business development. An example is how the telecom companies are supporting innovation in the Dar es Salaam Teknohama Business Incubator (DTBi).

For the development partner the incentive to contribute is on the appreciation that innovation contributes to achieving the sustainable development goals. We find for example Human Innovation Development Fund (HIDF) supporting innovations in the areas of education, health, water and sanitation.

For funds coming from government and/or public institution, government financial regulations shall apply to any funds disbursed for innovations, inventions and TK practices development and promotion.

PART SIX

6.0 CAPACITY BUILDING

6.1 Training

The Government should organize trainings to improve skills of the different stakeholders.

a. Training of facilitators/administrators who implement the guidelines, e.g., MoEST and COSTECH, VETA, SIDO, TCCIA and Local Government Authorities shall be conducted;
b. The training needs for inventors, innovators and TK holders shall be identified by the selected institutions. The selected institution shall be responsible for providing the trainings;
c. COSTECH, Development Partners and Private Sector will facilitate the training costs; and contributions from inventors, innovators and TK holders will be considered to enhance sense of ownership and value; and
d. To achieve sustainability, there should be a contract or MoU between the institution offering training and the funding institution.

6.2 Workshops for Inventors, innovators, TK holders and Entrepreneurs

The Government shall facilitate workshops and/or seminars as need arise for the purpose of:

a. Providing information for launching product or service;
b. Providing opportunity for start-ups and enterprises;
c. Advising participants on product development, marketing and patenting;
d. Creating a forum to network with other inventors, innovators and TK holders in similar situations;
e. Providing information for marketing and financing opportunities, locally and internationally.

6.3 Nationwide Capacity Building

The Government shall conduct nationwide capacity building covering areas such as:

a. Sensitization and awareness creation on inventions, innovations and TK practices in schools; exhibitions and public gatherings;
b. Promote and strengthening capacity of R&D institutions and Vocational Training Centres to support inventors, innovators and TK holders (VETA, SIDO and FDCs);
c. Strengthening capacity of relevant institutions to facilitate identification and assessment of inventions, innovations and on setting up Technology Transfer Offices;
d. Organize local and international workshops on issues related to innovation and inventions such as IPR for key players; and
e. Sensitization program on policy, regulations and guidelines related to S&T and innovations, which can be done through seminar, workshop, radio, flyers, posters and articles.

PART SEVEN

7.0 LINKING THE ROLES OF STAKEHOLDERS AND INSTITUTIONS RELATED TO INNOVATIONS, INVENTIONS AND TRADITIONAL KNOWLEDGE PRACTICES

Linkage among Ministries, NGOs, Agencies', R&D Institutions and COSTECH shall be strengthened, in order to achieve better utilization of innovations, inventions or TK practices in Tanzania. Institutions identified as stakeholders are:

7.1 Ministries:

a. Ministry responsible for Education, Science and Technology
b. Ministry responsible for Industry, Trade and Investment;
c. Ministry responsible for Energy;
d. Ministry responsible for Minerals;
e. Ministry responsible for Agriculture;
f. Ministry responsible for Livestock and Fisheries Development;
g. Ministry responsible for Natural Resource and Tourism;
h. Ministry responsible for Planning;
i. Ministry responsible for Finance;
j. Ministry responsible for Communication and Infrastructure;
k. Ministry responsible for Land & Human Settlement;
l. President's Office- Regional Administration and Local Government;
m. Ministry responsible for Labour, Employment and Youth Development;

n. Ministry responsible for Health, Community Development, Gender, Elderly and Children; and
o. Any other relevant ministry.

7.2 Local NGOs and Private sector

a. Local Indigenous Knowledge Systems Trust (LINKS TRUST);
b. Tanzania Association of Innovators (TAI);
c. Tanzania Renewable Energy Association (TAREA);
d. Tanzania Chamber of Commerce for Industry and Agriculture (TCCIA);
e. Tanzania Traditional Energy Development Organization (TaTEDO);
f. Intellectual Property (IP) Forum;
g. Muungano wa Vikundi Vya Wakulima Tanzania (MVIWATA);
h. Confederation of Tanzanian Industries (CTI);
i. Science, Technology and Innovation Policy Research Organization (STIPRO);
j. Jumuiya ya Vikundi vya Wenye Viwanda na Biashara Ndogondogo (VIBINDO);
k. Tanzania Private Sector Foundation (TPSF);
l. Tanzania Women Chamber;
m. Leather Association of Tanzania (LAT); and
n. Any other relevant NGO and/or private sector.

7.3 International Organizations

a. World Intellectual Property Organization (WIPO);
b. International Federation of Innovators Associations (IFIA);
c. United Nation Educational, Scientific and Cultural Organization (UNESCO);
d. African Regional Intellectual Property Organization (ARIPO);
e. United Nation Industries Development Organization (UNIDO);
f. Swedish International Development Agency (SIDA);
g. United Nations Conference for Trade and Development (UNCTAD); and
h. Other UN and Related International Organizations.

7.4 Agencies

a. Business Registration and Licensing Agency (BRELA);
b. Tanzania Food and Drug Authority (TFDA);
c. Copyright Society of Tanzania (COSOTA);
d. Tanzania Bureau of Standards (TBS);
e. National Environmental Management Council (NEMC);
f. Tanzania Atomic Energy Commission (TAEC);
g. Tanzania Investment Center (TIC);
h. Copyright Society of Zanzibar (COSOZA);
i. Business Promotion & Registration Agency (BRELA);
j. Local Government Authorities (LGAs);
k. Vocational Education Training Agency (VETA); and
l. Other relevant agencies.

7.5 R&D Institutions

a. Tanzania Industrial Research and Development Organization (TIRDO);
b. Centre for Agricultural Mechanization and Rural Technology (CAMARTEC);
c. Small Industries Development Organization (SIDO);
d. National Housing and Building Research Agency (NHBRA);
e. Tanzania Automotive Technology Centre (TATC);
f. Technology and Innovations Support Centres (TISCs);
g. Tanzania Engineering and Manufacturing Design Organization (TEMDO);
h. National Medical Research Institute (NMRI);
i. Tropical Pesticide Research Institute (TPRI);
j. Tanzania Food and Nutrition Centre (TFNC);
k. Tanzania Agricultural Research Institutes (TARI);
l. School of Pharmacy-MUHAS;
m. Tanzania Coffee Research Institute (TACRI);
n. Tanzania Atomic Energy Commission (TAEC);
o. Tanzania Communication Regulatory Authority (TCRA); and
p. Other relevant R&D institutions.

7.6 Higher Learning Institutions

a. University of Dar Es Salaam (UDSM);
b. Sokoine University of Agriculture (SUA);
c. Dar es Salaam Institute of Technology (DIT);

d. Ardhi University (ARU);
e. University of Dodoma (UDOM);
f. Mbeya University of Science and Technology (MUST);
g. Nelson Mandela African Institute of Science and Technology (NM-AIST);
h. Arusha Technical College (ATC); and
i. All other Higher Learning Institutions recognised by TCU and NACTE.

7.7 Financial Institutions

a. Bank of Tanzania;
b. Tanzania Investment Bank;
c. SACCOS;
d. Commercial Banks; and
e. VICOBA.

7.8 Establishment of Linkages

This shall be the task of COSTECH whereby the proposed linkages include:

1. Establishment of Innovation, Invention and TK Practices Committee, to be hosted by COSTECH with representations from key stakeholders;
2. Identification of representative in all relevant Ministries and key stakeholders; and
3. Organizing regular meetings of the committee facilitated by COSTECH.

PART EIGHT

8.0 INCENTIVES TO INVENTOR, INNOVATORS AND TK HOLDERS

The Government shall establish different incentives to be given to inventor, innovators or TK holders including among others:

a. Presidential Awards;
b. Recognition through-gazetting and/or announcing;
c. Issuing of certificates;
d. Issuing shields and/or medals;
e. Monetary awards;
f. Evaluation and presentation costs for inventions, innovations or TK practices;
g. Sponsorship to exhibitions and conferences;
h. Sponsorship for skills and further training;
i. Assistance in packaging and “prototype;”
j. Assistance in protection of their Innovations, Inventions or TK practices;
k. Availing them to Science and Technology Parks, Incubators, Cluster Systems, etc.;
l. Receive benefit from royalties and franchisee;
m. Assist in commercialization and enterprise development; and
n. Free advice.

PART NINE

9.0 STI-AWARDS THROUGH OLYMPIAD COMPETITION

9.1 Background

The current STI awarding system does not differentiate between grassroots and non-grassroots innovators. All have been treated equally. The data shows that in previous years, most of the applicants for STI awards were grassroots innovators other than the rest. This is a challenge which should be addressed. Furthermore, the current STI awarding system is not in the form of competition. Each applicant applies at his/her own pace. This has led to other applicants finding that their applications are delayed depending on when they have submitted their applications.

The proposed system herewith will be appreciated by many people to come to the competition. The Olympiad will have deadlines for application, processing and awarding. The Olympiad will involve completion for students' innovative ideas, grassroots innovations and non-grassroots innovations.

9.2 Awards Grouping

(1) Tanzania Award for Scientific and Technological Achievement (TASTA)

This award is given to Tanzanian who has made scientific or technological discoveries, inventions, innovations or adaptations which have relevance to the socio-economic development of the country.

(2) National Award for Research in Science and Technology (NARST)

This award is given in the recognition of and support to the high calibre scientific or technology development work carried out by an individual scientist/technologist or institution who in the opinion of the nominating body have made significant and outstanding contribution to advancement of S&T. Consideration will be given particularly to proven achievements judged particularly from national and international point of view. This award will be given in the field of life sciences, physical sciences, social sciences and engineering.

(3) National Award for Environmental Management (NAEM)

The threat posed by pollution of the biosphere and loss of resources is real. All activities of human being have impact on the environment.

This award is given to scientist/individuals or institution for their outstanding contribution(s) in the field of environment particularly in areas related to environmental sound technologies, pollution control, hazardous waste reduction, food, agriculture, natural resources and wildlife.

Nomination for the award could be made by: universities or R&D institutions or any Ministry responsible for environment; other scientist in the field of environmental protection, life sciences, earth sciences and social; science; and self-nomination.

(4)***School Science Awards (SSA)***

This award is intended to generate a scientific culture at the grassroots level. The award will be given to best schools or individuals or institutions that have registered an improvement in the utilization of S&T through innovation/adaptation in the year under consideration.

The categories for awards could remain the same i.e TASTA, NARST, NAEM and SSA. The proposed approach is to group the TASTA, NAEM and SSA for the non-grassroots innovators. For the pupils' innovation competition, the awards will be in following categories:

i. First *Amsha Ubunifu* Award
ii. Second *Amsha Ubunifu* Award
iii. Third *Amsha Ubunifu* Award.

For the grassroots innovation competition, the awards will be in three categories namely:

i. First Grassroots Recognition Award
ii. Second Grassroots Recognition Award
iii. Third Grassroots Recognition Award.

9.3 Mode of Application

The current mode of application is that any individual/institution who is convinced that he/she has made an innovation worth recognition can apply at any time. Applications have no deadlines.

The Olympiad will change the way of handling applications to be in a form of completion, annually or biennially. There should be deadlines for applications for these awards. The proposal is to have the following competitions:

(i) Annual Competition for Pupils' Innovations (Shindano la Amsha Ubunifu)

The objective of this competition is to bring-up pupils' innovative ideas. This will build a culture of building innovative capacity and capability of the future generation of Tanzania. There will be a need to collaborate with the Ministry responsible for Education and Vocational Training. Other potential partners include the Vocational Education Training Authority (VETA) and the Local Government Authority (LGA).

Applications for awards to be called from January-June in the respective year, processing of the applications will be in continuation till end of July, the potential applications for awarding will be tabled to the TASTA Committee in August and the awarding will be made in November during the STI week.

The best and promising ideas from the pupils (primary, secondary and vocational training) will be developed further by R&D institutions. The proposed name for this competition is "*SHINDANO LA AMSHA UBUNIFU*".

The awards for this competition will be in three categories namely:

i. **First** *Amsha Ubunifu* Award
ii. **Second** *Amsha Ubunifu* Award
iii. **Third** *Amsha Ubunifu* Award.

Other awards may be established as per the needs as the TASTA Committee may find it fit.

(ii) Biennial Competition for Grassroots Innovations

Competition for grassroots innovations and traditional knowledge practices should be an annual event. The application deadline should be up to the month of July of the awarding year, and advertisement for this award to be made just after the awarding of the previous competition. The applications will be processed as they come till end of July and the potential applications for awarding to be tabled to the TASTA Committee in August of the awarding year.

The awards for this competition will be in three categories namely:

i. **First** Grassroots Recognition Award
ii. **Second** Grassroots Recognition Award
iii. **Third** Grassroots Recognition Award.

Other awards may be established as per the needs as the TASTA Committee may find it fit.

(iii) Competition for Non-Grassroots Innovations

This will be run together with grassroots innovations. The procedures will be the same as for the completion for grassroots innovations. Guidelines and forms should be developed for this competition.

The categories for awards could remain the same as it used to be namely: TASTA (Gold, Silver and Bronze), NARST, NAEM and SSA.

PART TEN

10.0 OTHER ISSUES

The issues arising from the review of the following documents shall be incorporated:

10.1 National Policies

These guidelines have taken into account the policies among others are particular National ST policy (1996); Draft of National STI policy (2018); SME policy(2003); Empowerment Policy (2004); Research & Development Policy(2010); Biotechnology Policy (2010); National Nuclear Technology Policy (2013) and Draft of national IP policy. They should be seen as complementing the above policy documents and guide their implementation.

10.2 S&T Strategic Plan Overview

The S&T Strategic plan of MoEST (2015) has emphasized on matters of innovations and inventions. Hence, these guidelines provide guidance towards the implementation of the S&T strategic plan.

10.3 Relevant Acts

The following Acts among others are related to issues of innovations and inventions: COSTECH Act No. 7 of 1986, Patent Act No. 1 of 1987 (CAP 217 R.E. 2002), Copyright Act of 1999 (CAP 218 R.E. 2002), The Protection of New Plant Varieties (Plant Breeders' Rights) Act. No. 22 of 2002, Traditional and Alternative Medicine Act No. 23 of 2002,

Zanzibar IP Act and Provisions from these Acts could be used in the promotion, development and protection of innovations and inventions.

10.4 Legal Issues

The following issues should be considered in dealing with innovations and inventions:

a. Harmonization of IP Laws;
b. Awareness creation on criteria/requirements to patent acquire utility Certificates;
c. Need for National IP Policy (under process) and Institutional IP Policies as to ownership of IPRs; and
d. Other IP Rights which are not protected, including secrecy-Trade Secrecy.

10.5 Standardization Issues

Standards are of importance particularly in technologies interoperability and so reducing costs of doing business by providing clearly specified interface requirements for products. This will reduce costs of developing technologies/innovations by using on the shelf parts instead of producing such standardized parts. Using standardized components could lead to early market entry. Innovators and inventors needs to be advised on basic issues of standardization.

COSTECH will collaborate with TBS in offering such advisory services to innovators, inventors and traditional knowledge holders.

PART ELEVEN

11.0 SCHEDULE: WORKING TOOLS

There shall be eight working tool forms as follows:

1. Inventor/innovator TK holder Identification Form (WTF 1);
2. Prior Informed Consent Form (WTF 2);
3. Prior Informed Consent Explanatory Note (WTF 3);
4. Confidential Information Disclosure Form for Evaluation of Invention Innovation/ TK practices (WTF 4);
5. Evaluation and Assessment of the Invention/Innovation /TK practices (WTF 5);
6. Experts' evaluation and assessment of inventions/Innovation/TK Practices (WTF 6);
7. Guidelines for Evaluation of Award Application (WTF 7); and
8. Award Application Forms (WTF 8).

11.1 INVENTOR/INNOVATOR/TK HOLDER IDENTIFICATION FORM (WTF 1)

1. Please fill in correctly your personal details

   (a) Name ……..**.....**

   (b) Address ……

   (c) Telephone ……

   (d) Affiliated Institution ……..……

   (e) Physical Address/Location ……..

   (f) Fax ……..……

   (g) Email ……..……

   (h) Nationality ……..……

   (i) Educational Level ……...

   (j) Profession ……..……

2. Title of the invention/innovation/TK Practices

   ……

   ……

3. Brief Description of the invention/innovation/ TK Practices

……

……

……

……

……

4. When was the invention/innovation TK Practices made? …….
5. Is the invention complete or requires improvements? ……..….
6. Have you patented your invention/innovation? YES/NO
7. If NO what are the reasons? ……..……
8. Are you willing and interested in being involved in the commercialization personally or licensing to others of your invention? PERSONNALY/LICENSING

SIGNATURE …….. DATE……

Please send this form to:

Either

(1) The Director General

Tanzania Commission for Science and Technology

P.O. Box 4302

DAR ES SALAAM

Tel.: +255222927543/2927539

Fax: **:** +255222927551

Email: info@costech.or.tz

Website: www.costech.or.tz

OR

(2) Principal of any VETA near you

OR

(3) Local Government Authority near you

11.2 PRIOR INFORMED CONSENT FORM (WTF 2)

Technological Innovations, Inventions and Traditional Knowledge Practices

Dear Innovator(s)/Inventor(s)/Traditional Knowledge Holder(s),

The Tanzania Commission for Science and Technology (COSTECH), established in 1986, is a parastatal organization under the Ministry of Education, Science and Technology (MoEST). COSTECH is mandated to coordinate and promote science, technology and innovations in the country.

COSTECH strives to obtain the written consent and authorization from all the innovators/inventors/Traditional knowledge holders to disclose and/or add value to the innovation/invention/traditional knowledge practice submitted for inclusion in the National Register of Innovations, Inventions and Traditional Knowledge Practices to be established under the National Guidelines for the Promotion of Innovations, Inventions and Traditional Knowledge Practices. An explanatory note, describing the implications of various options given in the form, is enclosed along with this form to assist you to fill up the form. COSTECH assures full compliance with the conditions specified by you and any modification in these conditions will be taken up only after obtaining your written consent.

Reference No.: ……

……..

(Signature)

Stamp of COSTECH

Name of the Innovator:

……..……

Title of Innovation/Idea:

……

……

Kindly tick 'YES' or 'NO' in the appropriate boxes for items A to F

A. Can COSTECH shares your contact details with those interested in your innovation/idea? **YES/NO**

B. Can COSTECH display/publish your innovation/idea on the Internet/in *News Letter* or any other media? **YES/NO**

C. If YES, to what extent do you wish COSTECH to disclose the information furnished by you?

(a) Partial disclosure/summary YES/**NO**

OR

(b) Full disclosure **YES/NO**

And, under which of the following conditions:

(i) Only on commercial/improvement terms (if the interested party is willing to pay for it)

(ii) Free of Cost

(iii) Any other option? Please specify:

_____

D. Would you like COSTECH to add value to your innovation/idea (Analysis by experts, prototype development, Value Addition, testing, etc.) **YES/NO**

E. Would you like COSTECH to mediate on your behalf for commercialization (If applicable) (Developing business plan, market research, technology transfer, etc.) **YES/NO**

F. Would you like COSTECH to protect your Intellectual Property Rights (If applicable) **YES/NO**

Declaration: I/We have read this Prior Informed Consent Form carefully and have understood the implications of various choices described in the explanatory note. I/We have voluntarily decided to select the option/options which I/we have ticked above for questions from A to F. I/We understand that if the Innovation/Idea provided to you is already well known and is in public domain, then neither the

restrictions on its diffusion or application will apply nor the conditions of this form. I/We further assure COSTECH that all the information given here is true to the best of my/our knowledge, understanding and belief.

Name and Address of the Innovator(s)/Inventors/TK holder(s)

_____

_____

_____

Name and Address of the witness/Collaborator/Scout/COSTECH Representative:

_____

_____

Date :

Tanzania Commission for Science and Technology (COSTECH)

Ali Hassan Mwinyi Road, Kijitonyama

www.costech.or.tz

Email: info@costech.or.tz

11.3 PRIOR INFORMED CONSENT EXPLAINATORY NOTE (WTF 3)

Tanzania Commission for Science and Technology (COSTECH)

COSTECH is extremely happy that you have shared your idea/innovation based on your independent effort. We need your informed consent before we decide to share this with any third party, or on the web or in any publication, or with any prospective entrepreneur or potential investor, or other individuals or communities requiring that knowledge for their own livelihood needs, with or without any restriction as per your instructions.

The objective is to balance the twin goals, partly in conflict, of dissemination and protection of your idea/innovation. Dissemination will benefit communities and individuals directly without any cost whereas the protection and potential commercialization of the same through contractual arrangements may also help them but at some cost. If we had an intellectual property rights system in our country that granted the rights quickly, we could have got you the protection for new and non-obvious innovations with industrial applications. We could have then shared the innovation with others without causing any trade off. It is because of the absence of such a system that we need your PIC so that we do what you think proper under the circumstances. PIC is also needed to fulfill ethical responsibility that COSTECH has towards knowledge providers (individuals or communities) and grassroots and non-grassroots innovators.

COSTECH is duty bound to follow your instruction and keep complete confidentiality if that is advised by you. The purpose is to make you aware of your rights as a knowledge provider and as a contestant in any of COSTECH's competitions. This will help generate an environment of trust among various stakeholders who may provide innovation or add value to it or may have interest in commercial or non-commercial diffusion of the same. ***However, if the knowledge, innovation or practice provided by you is already well-known and is in public domain, then the restrictions on its diffusion or application will not apply.***

A. Sharing of address with a third party:

Quite often persons interested in an idea or innovation or traditional knowledge are keen to find out more about the same, just for curiosity's sake, or for adding value or doing further research or for exploring commercial opportunities of using the same.

Advantages of providing your address:

- The third party may directly contact you and thus his/ her transaction cost of seeking information will be reduced;
- You may be able to assess the terms of possible agreement directly without any influence or suggestion by COSTECH;
- Dissemination of your ideas may take place directly though you without any chance of distortion or loss of information.

Disadvantages of giving your address:

While dealing with a third party, you may or may not be able to

a) Ascertain the genuineness of the information seeker,

b) Negotiate a favorable deal,

c) Draw up a proper agreement safeguarding your interests.

In case you do not provide your full address, we offer to mediate and help in the process of negotiation and try to protect you from unscrupulous parties. However, even if you wish to deal directly with the third party and at some stage seek our help in negotiation, you are always welcome to contact COSTECH.

B. Sharing of the Innovation/Idea on the web site or through publication COSTECH Newsletter or other media like film: with full or partial disclosure.

C. Nature of disclosure:

(a) Partial Disclosure or Disclosure in summary form only.

Advantages:

Potential entrepreneurs, investors, or other collaborators including researchers in private or public sector may show interest in joining hands in improving the technology

or disseminating it on commercial or non-commercial basis in society. The summary statement for an herbal technology may mean, for instance, “An herbal solution to treat diabetes developed based on local

available raw materials". Likewise, in the case of a machine it may be, "a motorcycle based ploughing machine".

Appreciation may follow from others within and outside one's community when others with similar problems read or hear about your innovation. This recognition may prove to be more valuable for some people than any monetary reward.

The media (press, radio, television, etc,) may approach you for wider sharing of your innovation if they find the summary of your information interesting.

Disadvantages:

Potential investors, entrepreneurs, or scientists may not contact you for development/ commercialization of product, if adequate information about the uniqueness of the product is not available.

(b) Full disclosure:

Advantages

a. Any third party can contact you directly regarding your innovation with their queries;
b. Your innovation may gain recognition, publicity and respect among the readers/viewers/listeners;
c. Horizontal dissemination among peers or other members of local or wider community may encourage experimentation and possible utilization of the disclosed knowledge, thus increasing

opportunities for self-employment, poverty alleviation, environmental conservation and improvement in productivity;

d. Disclosure may, by itself, generate demand for the products among consumers or potential partners in value chain. In some cases, the process of using the innovation is complicated or all the materials are not available locally, such that users can not practice it or develop it on their own. In such a case they may like to buy it from the innovators and thus demand may get generated;
e. Potential investors, entrepreneurs, scientists may contact you for further development/ commercialization of the product.

Disadvantages:

a. The information will be in the public domain, anybody will be able to use the disclosed information;
b. Once the information is disclosed, a patent cannot be granted on the disclosed information. Any specific part of the technology not disclosed can still be protected;
c. Potential investors, entrepreneurs, or scientists may not contact you for the development/commercialization of the product if they can make it with the help of disclosed information on their own;
d. Other people may benefit from it without giving you any credit for the same.

Conditions for Disclosure:

(i) On Commercial Basis:

The right to use the technology is granted to a third party only on the basis of benefit sharing. The terms may vary from one commercial deal to another. In some cases, the entrepreneur may agree to offer a small amount as up-front license fee but may share a given proportion of gross sales (generally 2-3 per cent) as royalty for a given period of time. However, the ability of a technology to generate commercial demand may depend upon its uniqueness, its commercial viability, whether the technology is in usable form or requires further research and development to convert innovation or idea into a product.

Thus, even if somebody picks this option, it may be appreciated that COSTECH may not be able to immediately generate commercial options for everybody submitting entries to the National Register. We will share synoptic information on the web and in our databases, and then potential entrepreneurs may show interest in a specific technology or product. The disadvantage in marking this option is that only those users may get the advantage of your innovation that has capacity to pay for the right to license the technology. Further, in the absence of sharing full detail with others, those interested in developing this technology further may not be able to do so.

(ii) Free of cost:

The implication is that if some individual small farmer or artisan wants to use your innovation for personal application at his/her own small farm or in small workshop only, he/she can do so without any obligation to share benefits.

The disadvantage is that somebody may claim that it is for personal use but may later end up generating a commercial advantage. This will require a carefully drafted licensing agreement.

(iii) Technology Transfer:

(a) Assignment to COSTECH or authorization to mediate:

By assigning rights to COSTECH or authorizing it to mediate, innovator enables COSTECH to negotiate on his/her behalf with the potential entrepreneurs and investors. In the case of any dispute regarding transfer of technology to third party, COSTECH will provide legal support in deserving cases to innovators to enforce the agreements with the concerned party.

Advantages:

- You will receive guidance about when, at what terms and to whom the technology should be transferred
- COSTECH will contact the concerned persons/institutions for further development This will avoid the possibility of some third party taking advantage of the ignorance or lack of familiarity with the negotiation process on the part of the innovator

- The know-how or tacit knowledge may remain undisclosed and thus provide opportunity to negotiate separate agreements for the same

Disadvantages:

a. The assumed benefits in the licensing agreement may not actually fructify;
b. Given social expectations, the licensing terms may try to balance the interests;
c. of small entrepreneurs and thereby prevent the innovator from maximizing his/her gains;
d. In the absence of the disclosure of tacit knowledge, the technology users may have difficulty in exploiting the full potential of the technology.

D. Value Addition to the Innovation/Invention/Traditional knowledge Practices:

The innovation/invention/traditional knowledge practice can be shared only after it is made more effective or efficient by pursuing further research by the innovator herself/himself or by another research organization. The innovation /invention/traditional knowledge practice will not be shared with any third party without further research on it, if this condition is ticked. Value Addition would refer to analysis by experts, prototype development, testing, etc. The disadvantage is that if COSTECH or the innovator is unable for some time to take it up for

value addition, because of lack of priority or lack of resources, the innovation will remain undisclosed with the rest of the society. Further, in the absence of disclosure, some independent researchers may also not be able to come forward to join hands for value addition, adding/improving features or performance of the innovation, etc.

E. Mediation by COSTECH for commercialization:

The assignment of technology or right to COSTECH to mediate implies that COSTECH can intervene on the behalf of the innovator, communicator for various purposes such as development of business plan, products and market research in cases where applicable. It implies that:

(i) Consent for Business Plan preparation implies that COSTECH might engage students, Business Network members, or others to explore the business prospects of an idea or innovation or traditional technology after undertaking market research.

(ii) The consent for the product development may require COSTECH to engage institutions like Fabricators Network members, Value Addition, Research and Development Network members.

The cost of these activities may be recovered from the possible licensing fee or royalty income that might be generated from the commercialization of the technology or shared by the innovators wherever applicable and possible. COSTECH reserves the right to

include only some of the award winning or priority technologies accepted in the national register for pursuing above. Criteria may include potential social impact, uniqueness, possible positive impact on environment or poverty alleviation or on jobs, or just the wider consumer applicability in reducing drudgery of women, or increasing efficiency or development of dry land regions, etc.

F. Assistance in Protection of IPR by COSTECH

COSTECH will assist in protection of your Intellectual Property Rights if your innovation is truly unique. The cost of this activity may be recovered from the possible licensing fee or royalty income that might be generated from the commercialization of the technology or shared by the innovators wherever applicable and possible. The consent for IPR would enable COSTECH to pursue possible protection of Intellectual Property Rights by engaging its own team, or private attorneys.

CONFIDENTIAL INFORMATION DISCLOSURE FORM (WTF 4)

PART I

INVENTION/INNOVATION/TRADITIONAL/KNOWLEDGE PRACTICE DISCLOSURE

1.)Personal details of inventor/innovator

First Name	
Other Names	
Institution	
Dept./Unit/Group	
Position held	
Tel no.	
Fax no.	
Cell no.	
Email	
Postal address	
Website	

2) Co-Inventor/innovator(s) and their addresses

S/N	Inventor/innovators	Address

3.) Title of the invention/Innovation

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4.) Field of the invention/Innovation

This invention relates primarily to

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5.) Background and related art

(a) The technical problem addressed by the invention/innovation is:

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(b) The closest related art is described as:

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(c)The benefits of your invention/innovation are:

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6.) Written description of the invention/Innovation (Please attach additional descriptions to this form if necessary)

The invention/innovation is described as follows:

……..……

……..……

……..……

……..……

……..……

……..……

……..……

7.) Drawings (Attach drawings of the invention to this form if any)

8.) Conception of invention/innovation

(a) Date of conception: ……

(b) Date of first written description: ……

9.) Reduction to practice

(a) Has the invention/innovation been reduced to practice (does it work)?.....

(b) If no, what is the status of the invention/innovation ……

(c) Has there been any disclosure or use of the invention/innovation by the public? When and to whom?.....

……

10.) Is the invention/innovation currently protected by a patent or some other form of intellectual property rights?

If so, name the type of IP protection and owner of these intellectual property rights?

…….……

….……

If NO do you intend to protect? YES/NO…….

PART II: CONFIDENTIALITY

THIS AGREEMENT, between

_____, having an address

_____, hereinafter referred to as the "RECIPIENT", and

_____ having an address

_____

hereinafter referred to as the "PROVIDER," shall govern the conditions of disclosure by the PROVIDER to the RECIPIENT of certain confidential information (the "INFORMATION") relating to an invention/innovation entitled:

_____

_____

Developed by

_____

of the _____

With regard to the INFORMATION, the RECIPIENT hereby agrees:

(1) Except as provided in (3) below, not to use such information for any commercial purpose, but instead to use such information only for purposes of evaluating its interest in the said INFORMATION. The RECIPIENT further represents that its purpose for the review of the INFORMATION is not to form

the basis for filing a patent application or instituting any other proceeding in any patent office or court. The RECIPIENT agrees not to use the INFORMATION except for the purpose stated in this Agreement.

(2) Except as provided in (3) below, not to disclose the INFORMATION to others (except to its employees who reasonably require same for the purposes hereof and who are bound to it by like obligation as to confidentiality) without the express written permission of the PROVIDER. The RECIPIENT shall use reasonable care to maintain the confidentiality of the INFORMATION with at least the same degree of care as is exercised in respect of the RECIPIENT'S own proprietary information.

(3) The RECIPIENT shall not be prevented from using or disclosing information:

(a) If the RECIPIENT can demonstrate that such INFORMATION was in its possession at the time of the disclosure;

(b) Which is now, or becomes in the future, public knowledge other than through acts or omissions of the RECIPIENT; or

(c) Which is lawfully obtained by the RECIPIENT from sources independent of the PROVIDER

It is further agreed that the furnishing of the INFORMATION to the RECIPIENT shall not constitute any grant or license to the RECIPIENT under any patent rights now or hereinafter held by the PROVIDER or otherwise. The obligations of the RECIPIENT under the terms of this Agreement shall remain in effect for the period of three (3) years from the date of the RECIPIENT'S signature below.

To evidence their Agreement to the foregoing, the Parties have through duly authorized representatives executed this Agreement.

RECIPIENT ***PROVIDER***

Signed: _____ ***Signed:*** _____

Name: _____ ***Name:*** _____(Please fill in)

Title:_____ ***Title:*** _____

Date:_____ ***Date:*** _____

EVALUATION AND ASSESSMENT OF INVENTION/ INNOVATION/ TRADITIONAL KNOWLEDGE PRACTICE (WTF 5) TO BE FILLED AFTER THE ASSESOR HAS MET THE INVENTOR/

INNOVATOR/TRADITIONAL KNOWLEDGE HOLDER

A: Assessment of the inventor/innovator

1.) Is the inventor/innovator enthusiastic and committed to his or her invention/innovation? (Yes / No …….)
2.) Does your invention/innovation arouse from inventor/innovator's routine work? (Yes / No …….)
3.) Has the inventor/innovator has all skills for development of the invention/innovation? If not, what skills are missing? Are the necessary skills accessible? (Yes / No …….)
4.) Is the inventor/innovator interested in being involved in the development and commercialization of the invention/innovation? (Yes / No …….)
5.) Does the inventor/innovator(s) have any experience in business ventures or in commercialization (Yes / No …….)
6.) What is your general opinion in assessing the invention/innovation?

TOTAL SCORES: _____
ASSESSMENT

SCORES (%)	**REMARKS**
50 and above	

B: Assessment of the invention/innovation (FOR OFFICIAL USE ONLY**)**

1.) Is the invention/innovation potential for product development and commercialization? (Yes / No ……)

2.) At what stage of development is the invention/innovation? (Tick whichever is applicable)

fully developed and market ready	**prototype available**	**some development done**	**some research done**	**idea only**
5	**4**	**3**	**2**	**1**

C: Assessment of the intellectual property

1.) Is the invention/innovation potential for IP protection? (Yes / No)			
2.) Which will be the best route for protection of the invention/innovation? (Tick whichever is applicable)			
Patent		Trade Mark	
Petty patent		Trade Secret	
Industrial design		Plant Breeders Right	
Copy Right			

EXPERTS' EVALUATION AND ASSESSMENT OF INVENTIONS/ INNOVATIONS AND TRADITIONAL KNOWLEDGE PRACTICES (WTF 6)

A: Intellectual Property Ownership and Protection

Task	**1.) Check all contractual agreements such as employee agreements, contract research and consultancy agreements, license agreements, Non-Disclosure Agreements, assignments and third party funding terms.**
Questions to be addressed	a.) Is the current claimant legal? b.) Are there prior claims to the invention/innovation? c.) Does the invention/innovation currently commercialized?

Task	**2.) Literature and patent searches for novelty and prior art. Check Patent Office Register and databases for names of the patentee or applicant and for recorders of assignments, licenses and securities. Check all relevant "prior art" publications, evidence of prior use, results of prior art and infringement searches, reports and opinions supplied by the inventor/innovator. Consult with a patent attorney to determine patentability, broadness of claims, infringement on other patents etc.**
Questions to be addressed	a.) Is the invention/innovation or part thereof currently protected by an issued or pending patent or some other form of IPR? Have all key patents and patent applications been identified? b.) Are any third party rights infringed? c.) Is patenting the best option for protection of the IP? Is patenting the right route to maximize societal access to the technology?

B: Inventor/innovators

Task	**3.) Check the CVs and do a background investigation on the inventor/innovator Interview the inventor/innovator(s).**
Questions to be addressed	See Interview with Inventor/innovators a.) Is the inventor/innovator in the forefront of his/her field of invention/innovation?

C. Invention

Task	**4.) Assess the science/thinking behind in the invention/innovation, using experts in the field if necessary. Investigate the additional steps in the value chain required for commercialization.**
Questions to be addressed	a.) Is the invention/innovation scientifically sound and feasible? b.) Would it be possible to demonstrate the invention/innovation to a potential licensee or investor? c.) If the invention/innovation is not yet complete (idea only; some research done; some development done)? How long will it take and how much will it cost for development and commercialization? d.) Will the invention/innovation require any additional/new infrastructure or facilities not currently available to the

	inventor/innovators? What other facilities does the inventor/innovator/innovator have access to? e.) Are there any significant concerns or problems with the invention/innovation (technical, commercial, eventual market, regulatory issues etc.) that may result in failure to commercialize it? Does it need government approval or certification? f.) Does the invention/innovation have a single application or are broad-based applications possible? Does it offer the possibility of alternative deliverables, if commercialization fails?

D. Market

Task	**5.) Conduct market situational analysis**
Questions to be addressed	a.) Who are the customers for this invention/innovation? What are the different markets for which this invention/innovation might be used both locally and globally? Does the invention/innovation address a defined, identifiable, unsatisfied market need/niche? What specific need does it fulfill? b.) Does the invention/innovation improve on an existing product/process that is currently satisfying market

	needs? Does the technology represent a marginal or significant product improvement/cost reduction? c.) Have prospective licensees/customers been identified or secured? Has there been any commercial interest in the invention/innovation?

E. Economic and Social Benefits

Task	**6.) Assess the economic and social benefits of the invention/innovation.**
Questions to be addressed	a.) Will the inventions/innovations lead to increased employment, new capital investment, export opportunities, up-liftmen of previously disadvantaged individuals, rural development, sustainable poverty alleviation, and/or SME development? Will the inventions/innovations commercialization provide an import replacement? What Human Resource Development outputs can be expected from the commercialization of this invention/innovation? **b.)** How it can be put to practical use and meet needs of the people?

F. Commercialization

Task	**7.) Assess the potential commercialization routes for the invention.**
Questions to be addressed	a.) What is the most appropriate commercial route for the invention/innovation? b.) What is the approximate cost of commercialization through the suggested root? c.) Is significant investment required to take the invention/innovation to market? What are the proposed sources of fund?

<u>Recommendations</u>

Note: A confidentiality agreement should be entered between provider and the recipient (expert), refers to WTF 2.

11.4 AWARDS APPLICATION FORM (WTF 7)

APPLICATION FOR PARTICIPATION IN THE NATIONAL COMPETITION FOR SCIENCE, TECHNOLOGY AND INNOVATION.

1. Please fill your information below

(a) Name……

(b) Address……..……

(c) Mobile No…….……

(d) Institution……

(e) Residence……

(f) Date of birth……..……

(g) Email address……..……

(h) Nationality……..……

(i) Education Level……..……

(j) Professional ……...……

(k) Occupation…….……

1. Application applies (mark √ where applicable)
a. Invention ……..…...……..
b. Innovation…….…….
c. Application of technology in new environment ……
d. Creativity ……...……

2. Name of invention/innovation……

3. Make a summary of your application:

……

……

……

4. How do your discoveries / creations solve the technical problem?

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5. Given the above-mentioned problem, what is the technical solution that your discovery / creativity resolve? (Explain in detail, including information about important animations, pictures and other details)

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Provide details about the work that has already taken place in your creative / discovery area.

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6. What new thing do you claim in your discovery compared with what will happen to you? Provide information if you know if your discovery has ever been made by someone else?

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7. Explain the importance of your discovery

   a) How you contribute or contribute to the development of social and economic development in the country?

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   ……
   ……
   ……

   b) How did you contribute or contribute to building or developing a profession?

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   ……
   ……
   ……

   c) How have you been set up or can you be put on the use of improving the lives of citizens?

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   ……
   ……
   ……

8. Is your creativity / completion already ready for use?

   Yes / No (cancel the one not applicable)

   If yes, explain briefly.

   ……
   ……
   ……
   ……

9. Has anyone else participated in the creativity / discovery?

   Yes / No (cancel the one not applicable)

   If yes, explain briefly.

   ……

   ……

   ……

10. How did you get information about this competition?

   ……

   ……

   ……..……..…

This application includes other information submitted to:

Director General,
The Tanzania Commission for Science and Technology,
P.O Box 4302,
DAR ES SALAAM.

11.5 GUIDELINES FOR THE APPLICATIONS OF AWARD (WTF 8)

Applicant's name:_____ _____

The innovation's / invention's name:_____
Each category has 1 - 10 points

	LEVEL 1: PRIOR ASSESMENT	
	Category	**Explanation**
1.	**Product realism or creativity** Is there any new realism available to them?	
2.	**Creative designs in product** What is the discovery or creativity in the product?	
3.	**Social contribution and product development** Describe the presence of this social and economic contribution	
4.	**There is any science within that product** What scientific principles are contained in what is being asked?	
5.	**Application** Explain whether the relevant products are still in the idea or require improvements before they are used or are ready for use	
6	**Product relationship with concept of industrial development.**	

LEVEL II: DETAILS

What are your suggestions about the relevant products?

	DETAILS	YES	NO
	Products can be developed as new discoveries		
	Products can be developed as new innovations		
	Products can be developed as brand new products into new environment		
	The product is not new but should be developed		
	Product is not new and there are other products that are already used		
	Products not suitable to be developed		

LEVEL III: OTHER ISSUES

Can you invest in developing this product?	Yes	
	Not clear	
	No	

RECOMMENDATIONS

ASSESOR

Name: _____

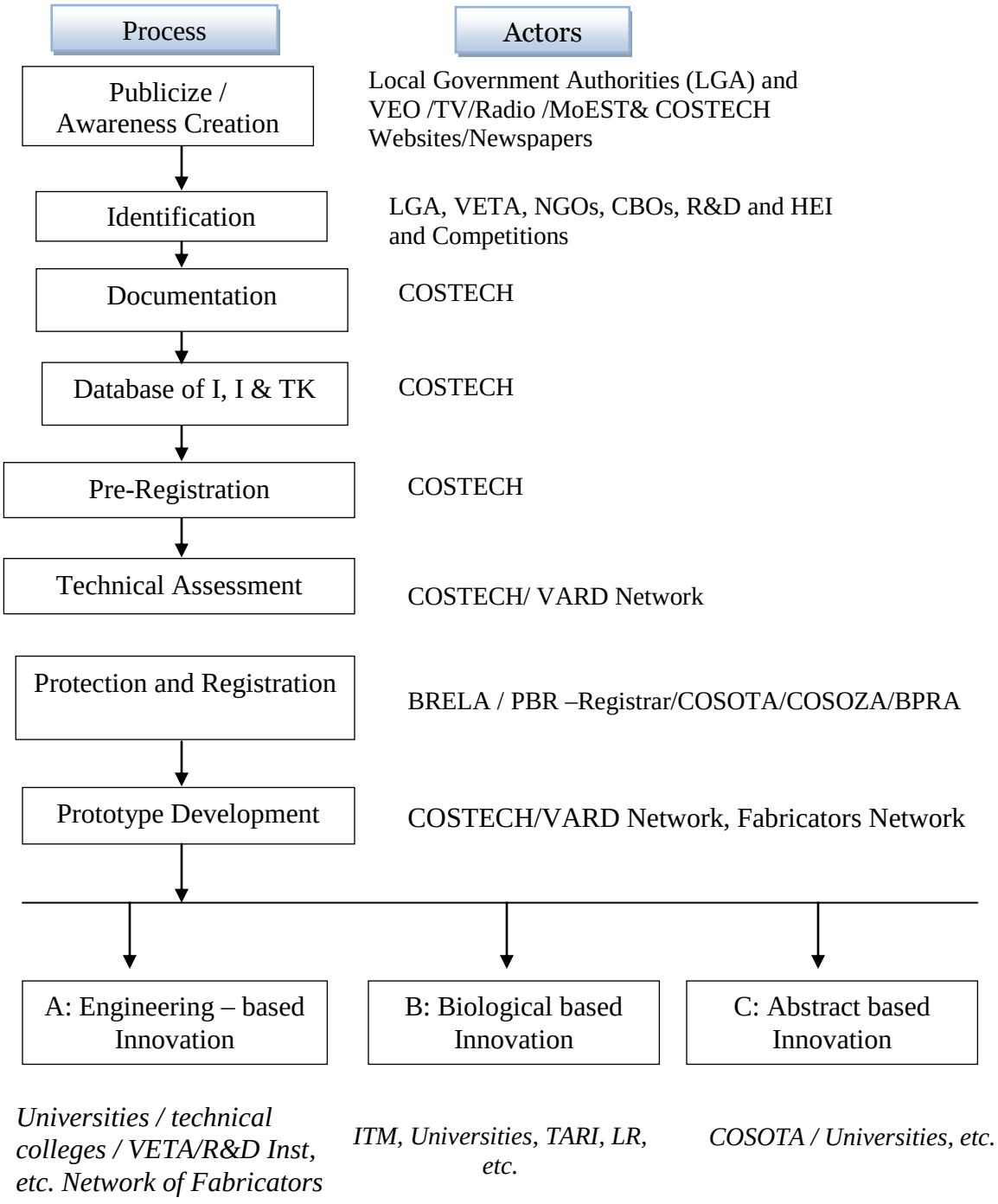
Signature: _____

Date: _____

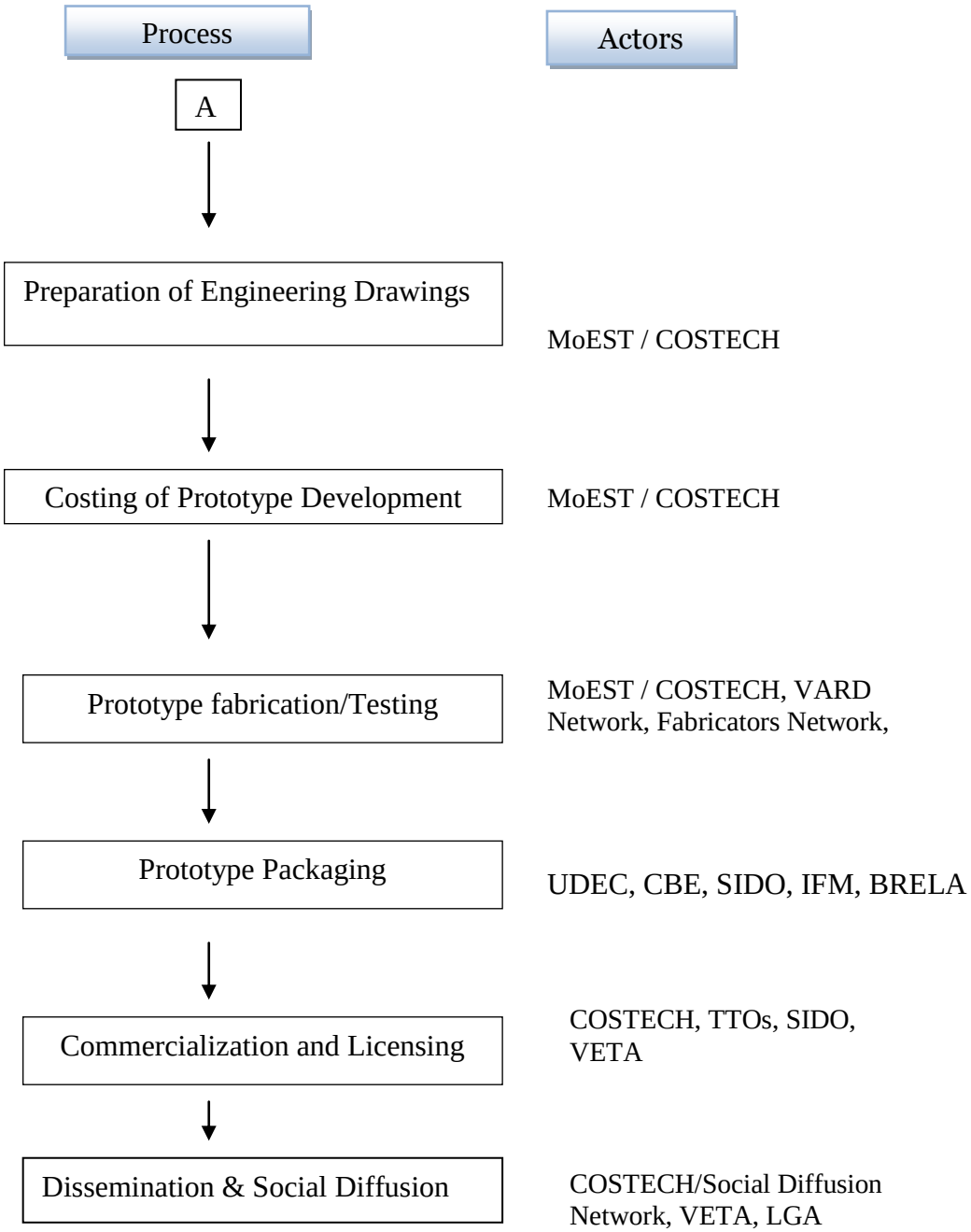
APPENDIX 1

DIAGRAMMATIC PRESENTATION OF PROCEDURES FOR IDENTIFYING AND HANDLING OF INNOVATIONS, INVENTIONS AND TK PRACTICES

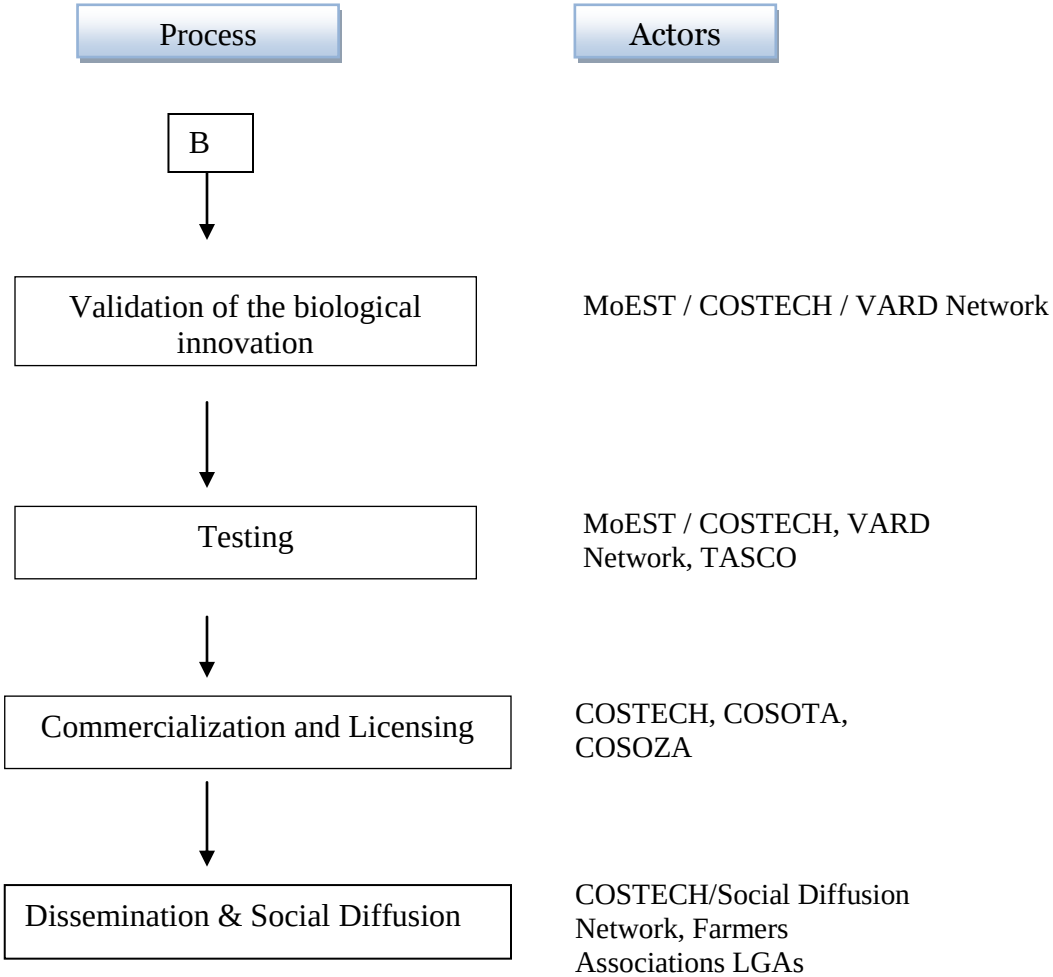
The following chart will be followed by Government in promoting innovators, inventors and TK holders:



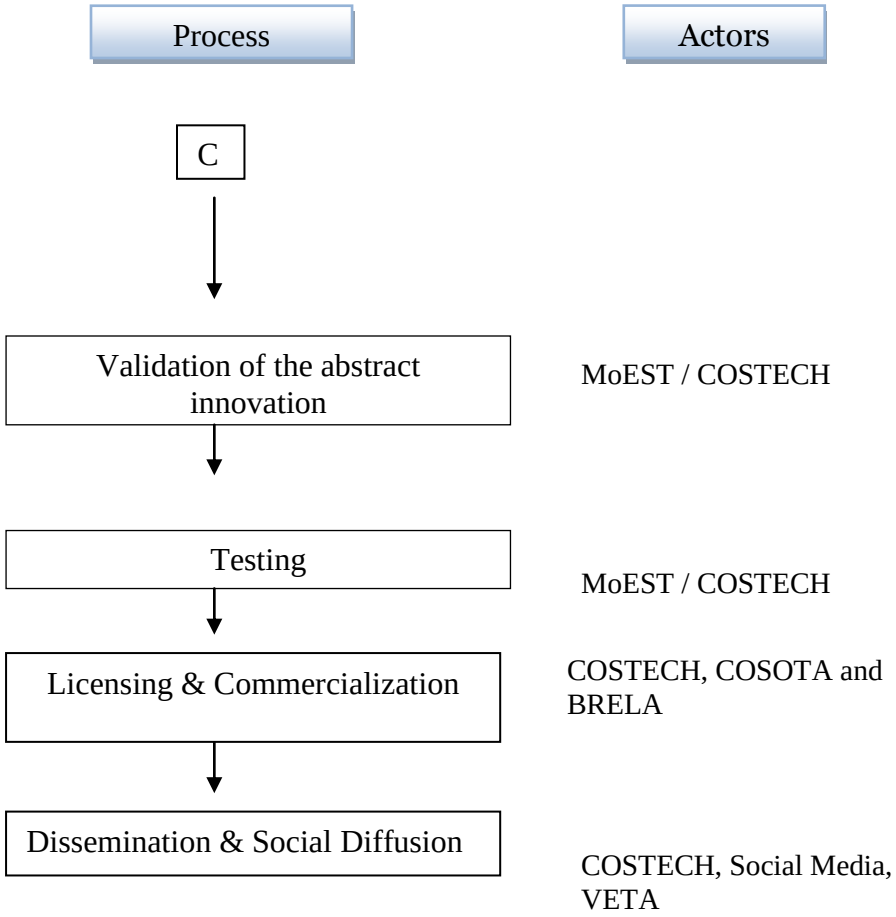
APPENDIX 2


Process
Actors
A
Preparation of Engineering Drawings
MoEST / COSTECH
Costing of Prototype Development
MoEST / COSTECH
Prototype fabrication/Testing
MoEST / COSTECH, VARD Network, Fabricators Network,
Prototype Packaging
UDEC, CBE, SIDO, IFM, BRELA
Commercialization and Licensing
COSTECH, TTOs, SIDO, VETA
Dissemination & Social Diffusion
COSTECH/Social Diffusion Network, VETA, LGA

APPENDIX 3


Process
Actors
B
Validation of the biological innovation
MoEST / COSTECH / VARD Network
Testing
MoEST / COSTECH, VARD Network, TASCO
Commercialization and Licensing
COSTECH, COSOTA, COSOZA
Dissemination & Social Diffusion
COSTECH/Social Diffusion Network, Farmers Associations LGAs

APPENDIX 4


Process
Actors
C
Validation of the abstract innovation
MoEST / COSTECH
Testing
MoEST / COSTECH
Licensing & Commercialization
COSTECH, COSOTA and BRELA
Dissemination & Social Diffusion
COSTECH, Social Media, VETA