

DAR ES SALAAM INSTITUTE OF TECHNOLOGY



INNOVATION POLICY



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1. Preamble

Technological innovation is essential for economic growth and enhancement of local, regional and global competitiveness of goods and services. This holds true both at the country, regional and global levels, in which the innovation is the driving force in economic growth for today's knowledge based, global economy. Innovation is thus the engine in wealth creation, social welfare facilitation and international competitiveness. Consequently, the presented innovation policy incorporates international, regional and national goals and policies, as well as contemporary development trends which present themselves both as challenges and strengths for national social-economic growth.

For instance, one of these national trends that have greatly influenced this innovation policy is Tanzanian vision 2025 "Strong and Competitive Economy". That is, 'Tanzania should have created a strong, diversified, resilient and competitive economy by 2025, which would effectively cope with the challenges of development which could confidently adapt to the changing market and technological conditions in the regional and global economy'.

From an innovation perspective, to be in competitive economy, Tanzania should strive to build a strong and solid intra collaboration of experts in research that gear to tangible products. A greater Interaction is required from multidisciplinary research to save as precursor for innovation development. This calls for a need for improved well-coordinated production of goods and services delivery which may lead to jobs and wealth creation.

As a well-known Institute of Technology in Tanzania, driven by its pursuit of Science Technology and Innovation-(ST&I), with a unique institutional culture based upon its vision, Dar es Salaam Institute of Technology introduces the innovation policy. The innovation policy intends to provide a proper management of Institute innovations, outline incentive for innovators, governance of seed money allocated for innovation. The policy intends to align the institute innovations with the national innovation guideline.

Furthermore, this policy outlines the structures, frameworks and mechanisms required to bring a collaborative engagement of departments and individuals from all campuses, so that they become active players and dedicated stakeholders in propelling the national vision 2025 toward an industrial economy. Since the science and technology have been identified as the foundations for socio-economic transformation in the Tanzania Vision 2025, this policy has the general and specific objectives fitting quite well with the Tanzania Vision 2025. To facilitate the achievement of its objectives, the policy has been anchored on the guiding principles of relevance, realism, cost-effectiveness, multi-disciplinary synergy, partnerships, need for empowerment, participation by all, equity and non-discrimination, ethical leadership and good governance.

Key definitions

- i. *Innovation*: A new and original form or item of Intellectual Property (IP).
- ii. *Innovator*: Scientists, researchers, department members, staff (researchers and non-researchers), students, candidates for masters and doctoral degrees, postdoctoral and pre-doctoral fellows, including any other person employed by the institute, whether full or part-time, emeritus member while at the institute, visiting lecturers and researchers, adjunct lecturers and professors, company representatives, administrators and any other person who create or discover applicable IP using any institute resources or who receives funds or other rewards for their services (work-for-hire), work done through research whether or not government funded, or those who voluntarily assign their IP to the Institute.
- iii. *Assignment*: The execution of a written agreement by the Innovator, assigning all of the Innovator's rights, titles and interests in and to an Innovation to the Institute. Innovations are assignable as of the time they are conceived or reduced to practice.

- iv. *Associate of Institute:* Diploma, undergraduate and postgraduate students, postdoctoral fellows, visiting scientists and any other individuals participating in research sponsored or hosted fully or partially by the institute or making significant use of DIT facilities, funds or other resources. Corporate associates, such as, companies and organizations who may take part in the activities listed in this definition.
- v. *Copyright:* Written materials, artistic works, directions, computer programs and similar types of informational material that is new and unique. Protection ensures the Innovator's or Institute's right, established at the point of innovation, to prevent unauthorized copying of an original work of authorship fixed in a tangible medium of expression, as well as the right to prevent some limited types or uses of those works, such as public performances.
- vi. *Industrial Design:* Is the ornamental or aesthetic aspect of an article. It may be the shape, the patterns, lines or color of an article. Industrial designs are what make an article attractive and appealing; hence they add to the commercial value of a product and increase its marketability.

2. Objectives and Scope of DIT Innovation Policy

2.1 Objectives of DIT Innovation Policy

The aim of the DIT innovation policy is to assure quality, provision of framework for adopting, management and transfer technology of institute innovation products.

Broader speaking, this innovation policy is to foster indigenous innovations that are an appropriate response to national needs, priorities and resources as well as creation of an innovation culture whereby solutions to socio-cultural and economic challenges of the individual, the community and the nation are sought in pursuance to Tanzania Vision 2025.

The Institute intends to manage its innovations in a way, which will benefit the Institute, the innovator(s) and the general public. The Policy has thus been developed for the following purposes:

- i). *To facilitate and enhance the transfer of Institute innovations derived from research and the dissemination of knowledge to the community.*
- ii). *To protect the equitable rights of the Institute, it's Innovator(s), researchers, sponsors and the public.*
- iii). *To stimulate additional support for research by industrial partners resulting in the innovation of novel technologies and creative works for commercialization.*
- iv). *To derive additional revenue for the support of Institute research and educational initiatives, as well as personal incentive for Innovator(s) to create and disclose.*
- v). *To provide a resource for the Institute community with respect to Intellectual Property.*
- vi). *To limit the infringement, improper exploitation and abuse of Institute technologies and creative works.*

2.2 Scope of the Policy

This policy should be read together with the research policy, if any, approved by DIT Council. The policy should also be read in line with the DIT Mission to provide competence based technical education through training, research, innovation and development of appropriate technology. . The policy should also open the door for academicians to participate in supplying solutions to the challenges faced by the scholar community, the country, the continent and the world at large.

The broader scope of this policy read as follows:

- i). To foster a well-coordinated innovation culture among the students, staff and other persons outside DIT;
- ii). To contribute towards raising the commercialization rate of innovations at the Institute and the nation at large;

- iii). To promote the formation of new technology-based firms through the establishment of an Innovation Park at DIT;
- iv). Promote identification, nurturing and commercialization of innovations.
- v). To offer guidance on mentoring of innovations at DIT and in benchmarking with internationally renowned best practices;
- vi). To ensure dynamic interaction among all players in the national intellectual property right;
- vii). To foster strong links between the government, industry, researchers and innovators;
- viii). To facilitate and promote involvement of women, youth and academicians and non-academicians in innovations and in related national governance and public policy making to ensure an all-inclusive participation;
- ix). To provide guidance on sustainable financing mechanism for DIT mentored innovations;
- x). To guide on the scouting of innovative ideas from individuals, Science, Technology and Innovation institutions and private sector;
- xi). To link-up DIT mentored innovators with other institutions and universities;
- xii). To guide on the establishment and regular updating of the database of innovation and in collaboration with other national incubated innovations; and
- xiii). To spearhead the DIT innovations awards for novel innovations to share and drive innovations to the society;

3. Policy Statement and Principles

3.1 Policy Statement

It is the policy of DIT that innovation be executed in identified research entities which promote innovative skills and ideas for the economic growth and improvement of community life in the country and the world at large.

3.2 Principles

The management model applied in this policy creates an institutional identity while allowing differentiation within the capability and capacity of all DIT Campuses. The innovation policy is geared towards increasing research and innovation quality, innovation management, facilitate and stimulate new research and innovation on all campuses. Each campus may develop and manage its own innovation through its departments in the umbrella of the Institute innovation policy (IIP). Participation will be limited to researchers, innovators, across the departments open to collaborations with others outside the institute.

4. Governance and Management of Innovations at the Institute

Innovation is considered successful if it causes a change in the product offered, services, business models or operations which meaningfully improve the life experiences of the stakeholders. Adminstrating the innovation may foster and catalyze the rate of change in the livelihoods.

4.1 Admission and Mentoring Exit of Innovations

- i). Innovations may emanate from an individual, any department from any DIT campus and nurtured to commercialization through the Institute Innovation center (IIC).
- ii). A department which identify an innovation among the students and staff may assist in referring them to the COSTECH or other guided bodies for admission guided by policy of the respective ministry through the IIC.
- iii). Innovations of DIT staff members/students emanating and mentored through COSTECH, government agencies, or other organs shall be guided by the COSTECH Policy or the respective organ/agency policy in terms of their admission, mentoring and exit but must be recorded and tracked by IIC.

- iv). All DIT innovations must be disclosed in writing to the IIC and thereafter to the Deputy Principal Academic, Research, and Consultancies (DPARC) through the office of Research, Publications and Postgraduate Studies.

4.2 Innovation Rules and Governance

- i). All innovations and innovation policies shall be approved by the DIT Council.
- ii). The Academic Committee shall govern the academic quality as well as the innovation quality.
- iii). The IIC shall advise the Academic Committee on the strategies, plans and quality of innovations from the departments.
- iv). The IIC shall have the responsibility of evaluating the innovation undertaken within the institute and make recommendations to the Academic Committee through a special form describing innovation.
- v). The IIC shall have accountable for innovation development, validation, technology transfer and incubation.
- vi). The Institute shall disclose each subject invention to the appropriate Government agency within two months after the inventor discloses it in writing to the Institute.
- vii). The Institute shall put in writing whether or not to retain a title to any such invention by notifying the Government agency within two years of its disclosure to the agency.
- viii). The Institute shall secure written agreement from all employees, other than clerical and non-technical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the Institute. Additionally, each subject invention shall have to comply with the disclosure provisions of paragraph (vi) above and execute all papers necessary to file patent

applications on subject inventions and to establish the Government's rights in the subject inventions. (See Annex 1-1)

- ix). The Institute shall submit periodic reports annually on the utilization of a subject invention or on efforts at obtaining such utilization by its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, and gross royalties received by the Institute
- x). Any research that may lead to innovation must have all attributes and procedure for research including ethical clearance, letter of permission and other necessary document. This document must be obtained from ethical clearance committee of the institute.

4.3 Adherences to Government Policy

In order to expand public use of innovation and in recognition of the need for establishing government-wide policies for the allocation of rights to government supported Innovation the public law shall be adopted. Thus, the following Acts should be studied and adapted to fit inventions that might take place in the Institute;

- i). Commission for Science and Technology (COSTECH) Act, 1986.
- ii). National Environmental Management Council (NEMC) Act, 2004.
- iii). Act Business Activities Registration Act, 2007.
- iv). Dar es Salaam Institute of Technology Act, 1997.
- v). Copyright and Neighboring Rights Act, 1999.
- vi). National Education Act, 1978.
- vii). The Zanzibar Copyright Act, 2003
- viii). The Fair-Trade Practices Act, 1994
- ix). The Universities Act, 2005 (2005)
- x). The Traditional and Alternative Medicine Act No. 23 of 2002 (2002)

- xi). The Patents (Registration) Act, (1995)
- xii). The vocational education and training act revised 2006.
- xiii). National Council for Technical Education Act, 1997 (No. 9 of 1997).
- xiv). Dar es Salaam Institute of technology policies and guidelines of 2006.

The most significant aspect of these laws is that the Institute shall comply with each of the above act and cannot use a single policy in administrating its innovation. Because these laws require that the staff member and/ or Institute initiate appropriate patent action for each innovation, it is essential that the staff member/ staff and students become familiar with the reporting requirements for each act. The most relevant of these policies and requirements are summarized in this Innovation policy and shall include the following:

"The innovation policy does not apply to funding agreements made for educational purposes. Specifically, no scholarship, fellowship, or training grant will contain any provision giving the students or innovator right to own innovation at the institute. Any innovation done as part of academic studies should remain the property of Institute Innovation center under the Department of Research Publication and Postgraduate Studies"

4.4 Non-government Support

The patent expectations of the many non-Government funding sources of Institute research vary. That fact innovation obtained at DIT Lab, workshop should be of the departmental registered or non-registered innovation and can have inclusive right of both practitioner and the supervisor of the project. For that matter, both will be recognized as innovator.

In discussions with any extramural research sponsor, principal investigators must take into consideration existing contractual obligations involving any personnel or resources to be involved in the proposed research in the respective lab or workshop. This is especially important where the proposed support is for research whose purpose is the same or similar to research conducted by the principal

investigator with some government funding. Written agreements between the employee and the sponsor may be used to designate assignment of inventions as long as the agreement does not conflict with Institute innovation policy or any others Institute policies on the conduct of research.

The disposition of all inventions generated at Dar es Salaam Institute of Technology, regardless of funding sources, is subject to review by Deputy Principal Academic, Research, and consultancies (DPARC). The purpose of the review is to determine if any contractual obligation exists in connection with and as a result of, the funding leading to the invention.

4.5 Institution/Staff Contractual Agreements

Special circumstances may arise where Department/staff work assignments have been made with an expectation that patentable materials will be produced. In such cases, a written agreement between the employee and the institute may be executed, specifying the disposition of any patents developed in the course of the work. The normal presumption of Department/staff ownership and control of patents developed on non-governmentally and non-donor funded projects prevails unless agreements to the contrary have been executed.

4.6 Procedures for Reporting of an innovation

When any member of the staff or student makes a discovery or innovation in pursuing his/her institute duties, or on institute premises, or with institute supplies or equipment, a report of this fact must be made to the office of the Institute Innovation Center. Such a discovery shall be filled in an "Invention Record and Report" form provided in Annex 1-2.

The Coordinator of innovation center (or designee) will judge the relation of the reported discovery or invention to the purpose of any grant or contract that may be involved.

The Coordinator of innovation center (or designee) has the ultimate responsibility for determining if an obligation to a grantor does exist and, if so, to ensure that such obligations are fully met.

In the interest of protecting the inventor's patent rights by the prompt filing of appropriate patent applications, the inventor is urged to pursue patent filing at the same time that the invention report is in process. As noted earlier, the opportunity to obtain foreign patent protection on an invention is generally lost if a publication disclosing that invention is issued prior to filing.

4.7 Innovation Management

- i). Innovation shall be managed according to the guidelines set by the IIC strategies.
- ii). Research and innovation shall be funded in accordance with the IIC strategies.
- iii). Any innovation managed by institute shall be reported to the Academic Committee, which shall direct on the strategies necessary to attain, promote, monitor and review Innovation activities within the institute.

4.8 Institutional Framework

- i). Innovation is the climax of science and technology as well as research and development. In order for an innovation to attain its full growth to commercialization, a number of actors shall be involved in a multi-disciplinary undertaking as stipulated here below.
- ii). A number of departments and organs associated with innovation from all DIT Campuses shall be involved in the innovation identification and subsequent mentoring to commercialization in a joint collaboration.
- iii). Under ordinary situations, applications for admission of innovations shall be sent to the Institute Innovation Center (IIC). Such innovations shall be nurtured by the mentors at IIC drawn from relevant department.

- iv). Any department of the Institute which identifies an innovation among the students/staff may assist in referring the student/staff to where application for admission shall be done through the normal procedure as specified in the IIC Policy.
- v). The mentoring of the innovation is then undertaken by IIC coordinator of the respective department and if possible, register with an innovation park.
- vi). In situations where innovators shall not coming from DIT but shall register as DIT students/staff, the innovation shall be admitted at IIC or any incubation center and will be nurtured by relevant professional mentors appointed from departments. The 70% of space at IIC and/or innovation park shall be dedicated to DIT students/staff while the remaining 30% shall be for non-DIT students/ staff.
- vii). Innovations shall however be nurtured at the individual Departments from all Campuses if the innovators find the necessary support at their Department(s)/Campus (es), however, the innovation shall be registered to the IIC.
- viii). Whenever the situation demands, external partners (industry) shall be involved in the mentoring and commercialization of innovations at DIT provided that such partnerships will be guided by specific MOUs/ MOAs/ Letters of Agreement, etc.

The Coordinator of IIC shall be answerable to the office of DPARC through office of Research, Publication and Postgraduate Studies who will report to the Council for necessary directions.

5. Benchmarking

Innovations nurtured at Dar es Salaam Institute of Technology shall be benchmarked using nationally approved standards as well as other internationally renowned standards. Consequently, the office of DPARC with IIC and various Departments' coordinators shall work very closely with all the relevant agencies

of the Government of Tanzania in specific to COSTECH, BRELA, TIRDO, NIMR and government ministries and any other body/stakeholder that may be deemed relevant to the objectives of this policy.

The IIC shall ensure the provision of effective, efficient and equitable support for researchers, through the Research and innovation management structures.

The overall process for innovation is captured in the document “The Institute Quality Assurance process for research and innovation”. This document should be developed in collaboration research department”. The general rules guiding innovation are defined within the following categories:

5.1 Innovation Strategy

The DPARC assumes the overall responsibility for the policy and strategy of innovation and technology transfer at the Institute. Innovation Coordinators in collaboration with Head of department or head of Campus will assume the overall responsibility for the management of innovation and technology transfer at the Department or campus level.

Innovation is a result of research therefore there shall be an Institute Research Ethics Committee (IREC). The IREC will be a standing committee of institute to approve research or innovation procedures. The purpose of the IREC shall be to ensure that research or innovation including or affecting humans, animals and the environment are conducted according to sound research ethics and principles The purpose of the IREC shall be to protect the wellbeing of humans, the environment and animals and also to ensure that the rights of humans are protected during a research project. The IREC will save as subcommittee in relation to other well recognized national committee such as COSTECH, NIMR, NEMC, etc. The IREC shall recommend the approval of research or innovation protocols for ethical clearance to the National Innovation Committee.

5.2 Innovation Structures

Innovation is performed within the defined Research Entities as categorized in the Institutional Innovation Strategy. All research entities are linked to the Department of any of the DIT campuses.

Internal Corporate Ventures (ICV), linked to innovation entities, are the responsibility of the heads of Departments.. Such ICV's are managed in fenced-off cost centers within the policies of the DIT.

DPARC, after consultation with the innovation support and Technology Transfer Center and the relevant line coordinator, may recommend to the institute the formation of spin-off companies inside or outside the country.

6. Innovation Funding and Supporting

The IIC in collaboration with the Department of Research and Postgraduate Studies shall; facilitate and evaluate all project proposals submitted for innovation funding; support the effective and optimal appropriation of the Institute's funds, including applications and allocation of funds, as well as the continuous monitoring and reporting of all innovation funds of the Institute. They shall also manage the administration of all government subsidized research and the handling of all such subsidy claims and facilitate the effective evaluation of innovation idea, internally and externally by the Department of Research and Postgraduate Studies and regular peer evaluation on international level or national level .

6.1 Funding of Innovations at the Institute

Funds are important resource for any innovation activity and it is the issue of cost which differentiates creativity from innovation.

Here are some earmarked source of funds for innovations at the institute.

- a) From the institute Research fund;

- b) From DIT Company dividends;
- c) From donors' supports;
- d) From various government bodies like COSTECH, Ministries, e.tc.
- (e) From any other source of fund including borrowing for innovation with the commercial value.

6.2 Evaluation of Innovation Project Proposals

The innovation shall be evaluated or assessed by its economic and innovation performance indicators and national goal and strategies. There is a possibility of having many innovations, all of them may be viable but do not address the societal problems, current trends and needs, and sometimes of no commercial value. For that matter, there must be a way of sampling innovation which qualify to be taken in the pipeline. There is the need for:

- i). A committee, with members from different areas of expertise and IIC coordinator, for assessing innovations.
- ii). Some criteria for selecting the innovations to be funded, feasible, emphasis on societal needs and relevancy as identified by the committee.
- iii). Anticipated commercial values and fast rate of return.
- iv). Institutional guideline or tool for assessment of innovation proposals and innovation works/products as identified by the committee.

The committee shall draw the criteria to be followed in the selection process. The criteria measurements will include:

- i). Measurement and benchmarking of the output defined in evaluation section.
- ii). The extent by which the Institute can earn and leverage funding for innovation activities, including the categories:
 - a) Fund finding, patent subsidies and awards

- b) Income stream funding from science commission, Government departments and the private sector
- c) Income stream funding from international sources in relation to incubation of the innovation

7. Commercialization of Innovation

Successful commercialization and entrepreneurship require specialist knowledge and a wide range of expertise. It is important that the commercialization process involve those with expertise in the content and specifics of research as well as those who can view the issues from the perspective of business development. However, filing an invention disclosure, obtain a patent or get a copyright doesn't guarantee that your innovation will be a success in the market. There are multiple influences that impact the commercial success of a product in the market, and the Institute Innovation Center shall in collaboration with the DIT Company Limited take the responsibility through the process of evaluating the commercial opportunity and further recommend any development that can take the product to go-to-market-strategy.

7.1 Five steps to Commercialization

The Discovery or Innovation process can be iterative, bouncing in a multitude of directions through trial, error, learning and back, until finally succeeds. The IIC shall apply the following steps in the process of commercializing the Institute Innovation / invention;

i). Identifying an Opportunity

The Opportunity phase consists of identifying the scientific and commercial value of the Innovation. For many inventors and scientists, the scientific value may be more straightforward than revealing the commercial value. The commercial value

is simply is the existence of a market and customers who are willing to pay for the technology that meets a need, either real or perceived.

Key steps in this process include:

- a) Cultivating a professional network in the innovated field of expertise,
- b) Research and
- c) Documentation

Proper documentation is critical in this phase, as it will become an integral part of the protection of your innovation. Keep detailed records and both innovator and coordinator, supervisor should not make public disclosures concerning the idea. Sharing of innovative ideas without proper “non-disclosures” may jeopardize the future protection of the concept and therefore shouldn’t be entertained.

ii). Assurance of Protection

Institutional IP policy will be a key in IP protection of products/outcomes of innovation activities. Once a meticulous description of the innovation/ discovery, invention is complete, a patent, trademark or copyright protection process should be initiated by the innovator or the center.

A **patent** gives the exclusive right to prevent others from making and selling the invention.

Trademarks offer protection for brands, symbols, logos and colors.

Copyrights protect original works of authors, composers, programmers and screenwriters. In some cases, acquiring a patent may take longer than the window of opportunity for commercialization.

iii). Business Case and Commercialization Plan/Strategy

This part of the process will determine if the innovation or discovery is truly feasible. A little of study will be needed on checking whether the society will need it.

It shall involve a comprehensive analysis of the industry and market, creating the value proposition, and close identification of the customer. That shall be handled by the IIC and it shall document the business operations, policies, legal structure of the business, marketing and growth plans, financials, and the team needed to make the venture a success.

iv). Building the Team and Securing Capital

The IIC shall formulate Right expects and business strategy for funding. Having the right expertise in the team will not only make the innovation projects more viable, but shall be critical to securing the needed capital investment for implementation and commercialization. Investors need to be assured that there is necessary expertise to execute the plan. In this phase, “The institute will need to prove to investors that the institute can make progress on the commercialization plan in a specified time.” Ownership issues and partnership opportunities shall have to be considered and outlined for the investors.

v). Executing the Plan and Developing the Product

This phase includes the deal-making negotiations of selling the technology to an existing business or the start-up process of a new business venture. Roughly, the start-up process includes finding a physical location to operate the business, hiring personnel, physically organizing your business workflow, stocking supplies, developing prototypes and general administrative organization.

At every step along the way, the business development plan may need to be reviewed, modified and refined to fit the current situation.

7.2 Path to Market

Participation in a commercialization process does not require previous experience of entrepreneurship or business development. The Institute innovations can be

taken to market in multiple ways. Some of the decision factors will depend on the availability of potential industry partners, formulation of team members, interest in entrepreneurship and the market-readiness of the innovation. The most common paths to market at the institute may include:

- i). **Licensing the technology to an industry partner:** Existing commercial entities across all industries often times turn to the Institutes to help them further extend product lines or help accelerate R&D efforts. For early stage discoveries, industry partners may first invest additional funding into the research to get it closer to commercialization.
- ii). **Licensing the technology to an existing startup company:** A startup company may be interested in taking on a technology that compliments their product or strengthens their value proposition.
- iii). **Creating a startup company to take the innovation to market:** For some innovations, it may be a great opportunity to form a company to go to market. Institutes, including partnership with spinout/subsidiary companies around technologies. This may be an excellent opportunity for a faculty or student with an interest in being an entrepreneur, or may be a good fit for a business mentor or local executive with successful startup experience
- iv). **Partnership with DIT- Company Ltd:** The partnership is for commercialization process, promotion and Marketing the Institute innovation

7.3 Partners in Identification, Nurturing and Commercialization of Innovations

DIT though IIC shall sign a Memorandum of Understanding (MoU) / Memorandum of Agreement (MOA) / Letters of Contract with individual partnering organizations, whether public, private, individual which are involved in the identification,

nurturing and/or commercialization of innovations. That shall hold true for all innovations whether nurtured under IIC or separately at the various departments from all DIT Campuses. The MoU to be signed shall spell out the specific roles of each stakeholder as well as the sharing of patents/copyrights and procedures of their identification. DIT in collaboration with relevant stakeholders shall identify, nurture, recognize and protect intellectual property rights of each innovator whose innovation is nurtured under DIT Campuses.

8. Patenting/Copyrights of Innovations

It is advisable for innovators to be aware of patenting and copyrights requirements. DIT Intellectual Property Rights Policy by the Office of the DPARC and those found patentable or requiring copyrights shall be guided through the necessary processes by the National Intellectual Property Rights (IPR) office and as per Government laws.

8.1 Ownership of Intellectual Property/Ownership of Innovation Discovered or Developed

DIT Staff members, Graduate students, postdoctoral scholars, and all others participating in research projects (including Ordinary Diploma and undergraduate students working on research projects, either for pay or for academic credit) must disclose "all potentially patentable inventions conceived or first reduced to practice in whole or in part, in the course of their Institute responsibilities or with more than incidental use of Institute resources. Title to such inventions shall be assigned to Dar es Salaam Institute of Technology. The Institute shall share with the inventor's royalties from inventions assigned to the Institute. These individuals are expected to sign the Dar es Salaam Institute of Technology Patent and Copyright Agreement.

In case where the research undertaken at the Institute is funded by the Institute or by any sponsor through the Institute, the Institute shall have the legal mandate for complying with all contractual obligations. Consequently, when an invention

shall be generated, the designated authorities at the institute shall review and make decisions with regard to patent rights as set forth by funding sources contributing to that invention. Titles to such inventions shall be assigned to Dar es Salaam Institute of Technology.

NOTE: The phrase “Institute responsibilities” is not generally interpreted to include a student’s regular coursework. However, if in the course of this work, a student makes more than incidental use of Institute resources (including specialized equipment, laboratories and research facilities) to create a potentially patentable invention, that invention must be disclosed to Dar es Salaam Institute of Technology and innovations assigned to the Institute.

8.2 Protection of Intellectual property Right/ Patenting/copy Rights of Innovation

The DIT mission underscores the need for discovering, transmitting knowledge and providing public service through research. The research environment may be conducive to conception and development of many forms of intellectual properties some of which may have commercial value. This can be enhanced through the use of patents. However, the contractual rights of external sponsors, system’s commitment to the principles of academic freedom, tradition of free and open discussion of research must also be maintained.

It is of great importance for the stakeholders to be well informed of their responsibilities and privileges once they have made inventions or discoveries.

i). Patent agreement

Patent agreements between individual department, or students and collaborators shall be acceptable at DIT provided they are in accordance with the innovation policy. In the absence of contractual provisions obligating transfer of all or some proprietary rights in an invention, the inventor shall be free to dispose off those rights at will.

In case where the research undertaken at the Institute is funded by external donors through formal research grants, contracts and consultancies then the Institute shall be the legal recipient of all grants and contracts, complying with all contractual obligations on behalf of staff or students from the departments and collaborators. Consequently, when an invention shall be generated, the designated authorities at the institute shall review and make determinations with regard to patent rights as set forth by donors contributing to that invention.

To ensure that all obligations attached to the grants and contracts are met by the involved partners, extramural support shall be required to complete a patent agreement which recognizes those obligations.

ii). Institution/Staff Contractual Agreements

Special circumstances may arise where department/staff work assignments have been made with an expectation that patentable materials will be produced. In such cases, a written agreement between the employee and the institution shall be executed, specifying the disposition of any patents developed in the course of the work. The normal presumption of department/staff ownership and control of patents developed on non-Institute funded projects prevails unless agreements to the contrary have been executed.

iii). Procedures for reporting an invention

When any member of the staff or student on appointment makes a discovery or invention in pursuing his/her institute duties, or on institute premises, or with institute supplies or equipment, a report of this fact must be made to the Deputy Principal Academic Research and Consultancy (DPARC) or his/her designee. The required "Invention Record and Report" form is provided in Appendix 1-2

The DPARC (or designee) will judge the relation of the reported discovery or invention to the purpose of any grant or contract that may be involved.

The DPARC (or designee) has the ultimate responsibility for determining if an obligation to a grantor does exist and, if so, to ensure that such obligations are fully met.

In the interest of protecting the inventor's patent rights by the prompt filing of appropriate patent applications, the inventor shall be urged to pursue patent filing at the same time that the invention report is in process.

iv). Restricted Inventions (Institutional/Staff Contractual Agreements)

When the DPARC's Office determines that an invention or discovery has been made under an institutional or contractual agreement the inventor will be advised of the options available. It will be the responsibility of the DPARC's Office to assure that the obligations of the contract are carried out.

Option 1: Submit the invention to the designated administrative office or extramural organization which will examine thoroughly the invention and will, when it considers such action is warranted in the public interest, accept assignment of the invention, prepare and file patent applications, and thereafter exercise its best effort to bring the invention quickly and effectively into public use.

Option 2: Propose to the DPARC or his or her designee that the institute assigns the invention to the Institute to dispose off as it sees fit. Although the inventor and the DPARC may recommend whether the invention ought or ought not to be patented, the final decision under this option will be made by the Institute.

v). Institute Inventions

When, after review by the DPARC or his or her designee, it has been determined that no third party is contractually entitled to exercise control over the proprietary rights in an invention, or that no contractual agreement exists with the institution, the inventor will be so advised and will be free to dispose off the invention. Practically speaking, any one of three options is available to the inventor.

Option 1: Submit the invention to designated office or organization as under Restricted Inventions.

Option 2: Under his/her own initiative and resources seek patents on the invention and thereafter administer, dispose of, or license such patents in whatever manner seems appropriate.

Option 3: Dedicate the invention to the public by publishing findings and taking no legal action.

It is important for the inventor to thoroughly weigh the relative advantages and consequences of the three listed options in terms of which will most likely result in early public use and greater public benefit.

vi). Publication

Regardless of the option selected, the inventor is free, indeed urged, to establish scientific priorities through publication of research results. It is recognized, of course, that short delays may be required to establish patent rights.

vii). Computer Software Ownership

- a) If the software is created under the sponsorship of a grant or contract, the ownership should be defined before the project is undertaken.
- b) If the software development is a joint effort (i.e., department and graduate students) the rights of ownership should be defined before the project begins.
- c) If the software is developed by an employee hired for that purpose, the software is owned by the Institute.
- d) Each department should inform students and staff of their ownership rights.

9. Administration of Revenue from Innovation Projects and Activities

Revenues raised through innovation projects and activities need proper handling, control and transparency in their utilization for the benefit of the innovator and institute at large. The revenues generated from the Innovation projects shall

therefore be spent in accordance with the Innovation Policy and the institute financial regulations.

The Innovator and the Institute, being interested parties, shall monitor and control the disbursements of innovation project funds. The disbursement of Innovation generated funds shall be incorporated in the budgetary plans of institute as approved by the Innovation Center, the Management, and the DIT Council.

The innovator will get share of the revenue from innovation project according to intellectual property, research and innovation policies. Funds which are in line with research and publication and link with innovation shall be utilized according to research and publication and innovation.

Financial support for innovation administration activities will partly be funded through the Research Projects and when substantial investment is required depending of project, external investment from other stakeholders shall be requested.

10. Bureaucratic Reporting

The IIC Coordinator cum Coordinator of Research shall be reporting to the Head of Publications, Research and Postgraduate Studies, who will report to the office of Deputy Principal Academic Research and Consultancy (DPARC).

10.1 Remuneration Issues

- (i) The Innovator will continue to be paid 20% of the profit if the product of the innovation is commercialized.
- ii). Revenue generated by external distribution should be shared between the author and the institution in accordance with revenue distribution schedules, established in percentages, based on pre-amortization⁵ and post amortization of the project costs, as follows:

- a) *Pre amortization.* A reasonable pattern of distribution prior to amortization provides an approximate return of ten percent of gross receipts to the innovator with ninety percent retained for distribution to the department or functional equivalent or institution for amortization of their contributions.
- b) *Post amortization.* After amortization, the innovator's share of receipts should increase to approximately twenty-five percent of gross receipts.

11. Publication and Dissemination of Innovation Discovered/Developed

Publicity of the innovation brings awareness to the society about the presence of the solution to a particular problem, and is a way of taking the innovation from the institute to potential investors, users, and industries. To address this, the following shall be done;

- i). Establish an innovation Day once a year at the institute. This day shall be used to showcase institutes innovations whereby local and international media shall be invited.
- ii). Build show rooms along the institute wall fence so that even the passerby should be given opportunities to see the innovations.
- iii). Establish innovation publication book at least once a year which will keep record and make it available to the public for reference.
- iv). Establish a page/link for published innovation on the DIT website; that will promote innovations.
- v). Acknowledgement to the institute for any publication related to the innovations.

12. Institution Framework

Innovation as new ways of doing things in an economy is the catalyst towards elevating scientific and technological ideas and skills which endeavors

transforming societal development. Many stakeholders of DIT at individual or institutional level, ought to be involved in the innovation activity through research and projects which bring up new ideas and ways of solving societal problems in an economical way. For an effective innovation to reach and grow up to the stage of commercialization, a number of actors need to be involved in a multi-disciplinary undertaking and at different levels as stipulated here below.

Campuses, , departments, centers and other units as may be established by the Dar es Salaam Institute of Technology shall be involved in the innovation identification and subsequent mentoring to commercialization it in the following collaborative manner;

- i). Applications for admission of innovations shall be sent to the **IIC coordinator through the Head of Publications, Research and Postgraduate Studies** before being accepted and admitted at the center and shall be nurtured by the mentors at the IIC drawn from relevant departments.
- ii). Any department from any DIT Campus which identifies an innovation among the students and/or staff shall whenever necessary assist in referring the student and/or staff to the Institute's Innovation Centre where application for admission shall be done through the normal procedure as specified in the form No 1-2. The mentoring of the innovation is then undertaken by Professional Mentors drawn from relevant department(s) under the coordination of Institute's Innovation Centre.
- iii). Where innovators are not students or staff of the Dar es Salaam Institute of Technology, the innovation will be admitted at Innovation Centre and will be nurtured by relevant professional mentors appointed from the relevant organization, campus, or departments under coordination of the Innovation Centre.
- iv). Where need arises, external stakeholders such as industries shall be involved in the mentoring and commercialization of innovations at the

Institute provided partnerships with such external stakeholders shall be guided by specific Memorandum of Understanding (MoU) or Memorandum of Agreement (MoA).

13. Dispute Resolution

Any disputes between Dar es Salaam Institute of Technology and an innovator, a partner/stakeholder on the ownership of innovations or on its commercialization or any differences in relation to the innovations activities under this policy shall be resolved amicably within the period of sixty (60) days from the date which one party gives a notice of the dispute. If the dispute remains unresolved after the stated period, either party may refer the dispute to the Court with competent jurisdiction in Tanzania or as may be agreed in the respective MoU.

Annex 1-1: Invention and Patent Agreement

Surname.....(Middle Name)First Name
ID NUMBER.....

As a condition of and in consideration of my participation in any extramurally sponsored research/project or other extramurally supported activity at Dar es Salaam Institute of Technology, I hereby agree to disclose promptly to the Institute DPARC (or designee) any invention conceived and/or reduced to practice by me, whether solely or jointly with others, resulting in whole or in part from such extra-morally supported activity. I further agree that I will comply with the provisions of any agreement between the Institute and any sponsor pertinent to the particular activity supported by that sponsor in which I am involved, and will cooperate in assuring that the sponsor's rights, including rights in inventions and patents, are fully protected.

If I am the Principal Investigator of any extramurally sponsored project, I shall require that each participant in such project sign this Agreement and become familiar with the provisions in the agreement between that extramural sponsors and pertinent to participation in the project, including invention and patent provisions of Dar es Salaam Institute of Technology, and with the Dar es Salaam Institute of technology policies concerning inventions and patents.

Inventor (Name)..... Date

Annex 1-2: Submission form for Innovation Record and Report

Submit to the office of Deputy Principal (Academics, Research and Consultancy)

(Person name): Date:

1. Brief descriptive title of invention:
2. Full name of inventor(s), home address(es), and appointment title(s):
3. Recommendation of inventor(s) whether patent should be sought:
☐ Yes ☐ No
4. Results to be achieved by the practice of this invention:
5. Outline of means discovered for achieving above results in terms of
 - i). The steps in a process, or
 - ii). The components in a composition or groups in a chemical compound (include description of process of making) or
 - iii). Elements in a machine, article or device. Point out means which are essential, others which are important or useful and any critical limitations on any of these.
6. Chronology of principal events in conception and developments:
 - (a) Earliest conception date (reference to substantiating evidence desirable):
.....
 - (b) Date of disclosure (orally or in writing) to other persons and names of such persons:
.....
 - (c) First written record pertinent to invention:
.....
7. Source(s) and amount(s) of all grant, contract or gift funds used by inventor(s) regardless of purpose or use during the period starting with the date noted in item 6(a) and continuing to the present.
8. Identify those sources indicated in item 7 which contributed to the invention.

9. Date and place (e.g. particular periodical) or any publication regarding invention (whether publication has occurred or is projected):
.....

10. Background of published information and practice in the field of the invention (known practices, periodical citations, patents, etc. Attach documents if pertinent.)

11. Features embodied in this invention which would not have been obvious to or readily foreseeable by the typical skilled worker in the field:
.....

Innovator (Name):

Signature:

Date:

Witness (Name):

Signature:

Date:.....

Certification by Inventor's Supervisor

(Dept. Manager, Program or Coordinator)

I have reviewed the information provided above with particular reference to item 8, source of funds contributing to the invention. To the best of my knowledge, I believe the above statements to be accurate.

Supervisor:

Name: Signature: Date

Appendix 3-1 Invention and Patent Agreement

Names:

(Last)..... (First)..... (Middle).....

PIN NUMBER

As a condition of and in consideration of my participation in any extramurally sponsored research or other extramurally supported activity at Dar es Salaam Institute of Technology, I hereby agree to disclose promptly to the DPARC (or designee) any invention conceived and/or reduced to practice by me, whether solely or jointly with others, resulting in whole or in part from such extramurally supported activity. I further agree that I will comply with the provisions of any agreement between the Institute and any sponsor pertinent to the particular activity supported by that sponsor in which I am involved, and will cooperate in assuring that the sponsor's rights, including rights in inventions and patents, are fully protected.

If I am the Principal Investigator of any extramurally sponsored project, I shall require that each participant in such project sign this Agreement and become familiar with the provisions in the agreement between that extramural sponsor and pertinent to participation in the project, including invention and patent provisions Dar es Salaam Institute of Technology, and with the Dar es Salaam Institute of Technology's policies concerning inventions and patents.

.....
.....

Signature..... Date.....

*The Office of DPARC will assure that this agreement is on file for each Principal Investigator. The Principal Investigator is responsible for filing the agreements of the project staff with the DPARC.

