DAR ES SALAAM INSTITUTE OF TECHNOLOGY

INVESTMENT POLICY

September 2017

Table of Contents

ACRONYMS AND ABBREVIATIONS

CBD	Central Business District
CSP	Corporate Strategic Plan
DIT	Dar es Salaam Institute of Technology
DTC	Dar es Salaam Technical College
DTI	Dar es Salaam Technical Institute
FIA	Fixed Income Assets
ICB	Institutes Consultancy Bureau
IRR	Internal Rate of Return
NPV	Net Present Value
PBP	Pay Back Period
PPP	Public Private Partnership
SWOC	Strength, Weaknesses, Opportunities and Challenges

EXECUTIVE SUMMARY

Dar es Salaam Institute of Technology (DIT) was established by an Act of Parliament No.6 of 1997 as a high technical training institution in Tanzania. DIT has a vision of becoming the leading technical education institution in addressing societal needs. Among others, the mission of DIT is to provide competence based technical education through training, research, innovation and development of appropriate technology. Besides, DIT is positioned to respond to a call by the President of 5th phase Government of the United Republic of Tanzania (URT), His Excellence Dr. John Pombe Joseph Magufuli, to spearhead realization of industrial economy by 2025, as spelt out in his inaugural speech to the Parliament of Tanzania on 20th November, 2015. Furthermore, Ministry of Finance and Planning through a letter with Ref. No. CLC.154/337/01/40, dated 18th October, 2016 has directed all public institutions to prepare an investment policy.

During the recent years, the Institute has not been able to fully discharge its functions as envisaged due to dwindling funding from the Government. As at 30th June, 2016, the Institute had deficits amounting to TZS 11.8 billion, amid debts from various service providers. Due to this difficulty, the Institute has never been at a position to place any resources in any income yielding assets (investments) that could create additional resources. In order to address this situation, various attempts have been made. These include establishment of an Institute Consultancy Bureau (ICB), evolving more students into newly established marketable academic programmes as well as promulgating various strategies to revamp the Institute and enable it sustainably to discharge its functions. Despite all these efforts the Institute has remained financially stressed to an extent that her services are at stake.

It has been therefore wisely thought to have a policy that could give guidance on various approaches towards making the Institute obtain additional resources that could, in addition to government subvention, support delivery of its highly desired products. This is the Investment Policy whose objectives are premised on the philosophy that *financial sufficiency is the key for delivery of quality technical education.* Adequate funding gives ability of the institution to offer practical training and conduct research activities which are keys for quality technical education. After a consultative process including reviewing experiences elsewhere, it is proposed that the portfolio of investment of the DIT should consist of the following three key assets:

i) Fixed Income Assets (FIA) which shall include cash, fixed deposits in financial institutions, treasury securities, corporate bonds, unit trusts, promissory notes, and loans.
ii) Equities.
iii) Property.

Percentage allocation limits of resources in each asset class shall be made once liquid resources are created and shall be reviewed periodically to reflect developments in the markets and guidance on the need for balancing return, liquidity and risk.

Under FIA class, DIT shall keep cash in current accounts to cover expenditures not exceeding one week. Any excess will be placed in other assets within this FIA class consistent with the projected expenditures of the DIT, which shall be approved by the relevant management committees.

Equity comprises listed and unlisted shares. DIT shall buy listed shares through registered brokers. For unlisted shares, DIT shall participate to the extent that it feels unable to undertake some major projects and therefore, it needs to participate under Public Private Partnership (PPP).
Property asset, specifically that focuses on investment in property, which, if well exploited, could generate the much needed liquid resources. Efforts should be initiated to redevelop the properties at its campuses by pulling down some old and/or poorly designed buildings so that a better plan is put in place, a plan that will see DIT transforms its appearance and introduces

various facilities for commercial interests. Consistent with its established functions, other properties like that of Mbezi Beach should be developed into a world class technology incubator or commercial centre of excellence for discoveries, innovations and repair of high-tech devices and equipment. Various stakeholders including telecommunications companies may be invited to design and finance the construction and operations of the centre.

There shall be limitation to this proposal due to lack of liquid resources to invest for now and for the foreseeable future. The DIT does not have investable financial resources at present. It has therefore been proposed that all properties including buildings should be valued by a valuation expert to determine their value and therefore the value of the property portfolio of the DIT. Following this valuation, a business plan shall be developed to show how these resources could be transformed into liquidity. Various development options must be considered using experiences that is available. There should be a critical analysis on whether such development should involve PPP or DIT alone using loans from financial institutions. Experiences of most developers use loans from financial institutions pledging land titles as security. DIT should explore this option as well, in addition to various PPP options for each specific development.

Most investors in property do consider the residual value of land as addition to the utility of the building, however, for DIT, the key determining factors in this type of investment shall be the following:

i) Pay Back Period (PBP)
ii) Net Present Value (NPV)
iii) Internal Rate of Return (IRR)

The PBP shall be reasonable enough to pay for the investment cost. Where the funds have been borrowed, to create a property, a payback period should be consistent with the duration of the loan. Where funds are from own resources or government, the PBP should not be longer than the period that the property will need major renovation.

NPV shall be significantly positive! Where two properties are considered, the one with high NPV will be implemented first.

IRR shall be significantly greater than those obtaining returns in the market, and that, where two properties are brought for consideration, the one with higher IRR will be implemented first.

1.0 INTRODUCTION

1.1 BACKGROUND

Historically, Dar es Salaam Institute of Technology (DIT) was established in 1997 by the Act of Parliament, No.6 to replace the Dar es Salaam Technical College (DTC), which had a long history of offering technical education training in Tanzania. This history dates back to 1957 when its predecessor; the Dar es Salaam Technical Institute (DTI) was established with the main task of providing vocational training in the country. The Institute later expanded its scope to offer technical secondary school courses and training for technical assistants before it was upgraded in 1962 to become the DTC: the first formal technical training institution in the country.

Part of the responsibilities of DTC at that time of its inception was to train technicians under the London City and Guilds Training Programme. In order to enhance its contribution to the national capacity building in technical manpower, in 1964, the college introduced two and a half year Ordinary Technician Diploma (OTD) programmes in Civil, Electrical, Telecommunications and Mechanical Engineering. These were later upgraded into three years Full Technician Certificate (FTC) courses in 1970/71. The College also introduced Diploma in Engineering (DE) programmes in the four traditional engineering disciplines to provide post-FTC technical training. Later on, courses for Laboratory Technology and Diploma in Technical Education (DTE) were also introduced.

The position of DTC in the provision of higher technical education was consolidated in 1991 when the corresponding Advanced Diploma in Engineering (ADE) programmes replaced the Diploma in Engineering

(DE) courses. Today, DE and ADE graduates can be found in almost all engineering firms/institutions and positive feedback is available from the respective employers indicating their overall performance as good. These achievements however, needed to be complemented with some more proactive Dar es Salaam Institute of Technology plans to cope with the new developments in the country and worldwide. The 1990's political and economic trends, as well as the new technological changes have increased competition in the demand for, and supply of quality products including technical education and services. Under such a competitive environment, the leading position of DTC in the provision of higher technical education could not be sustained for long, with its old set-up and mission.

Basing on the above facts, birth of a new institution was therefore necessary to replace the Dar es Salaam Technical College. The aim of the new institution was to effectively address the current technological developments, provide competitive academic outputs in terms of quality technical training, conduct applied research and provide expertise services to the general community. The Dar es Salaam Institute of Technology was therefore established in 1997 to realize that aspiration.

DIT is a fully accredited Institution by the National Council for Technical Education (NACTE). It offers a wide range of full-time, part-time professional engineering qualifications and programmes. It is worthy to note that, the Institute replaced the FTC and ADE programmes by Ordinary Diploma, Bachelor of Engineering programmes and Masters of Engineering (i.e. National Technical Awards (NTA) Level 4-9) in line with the NACTE competence based modular training system.

1.2 BASIC FUNCTIONS OF THE INSTITUTE

The DIT mission is translated into concrete functions, which are also clearly highlighted in its establishment Act as follows:

1.2.1 To provide facilities for studying and training in the principles, procedures and techniques of Electrical Engineering, Mechanical Engineering, Civil Engineering, Computer Studies, Laboratory Science and Technology, Electronics and Telecommunications Engineering, Leather products technology and such other related disciplines as the Institute may from time to time decide;

1.2.2 To conduct training programmes in the disciplines specified above;

1.2.3 To engage in applied research and development in the disciplines specified above and evaluate the results achieved by the Institute training programmes;

1.2.4 To provide consultancy services to the Government, parastatal bodies or industries and such other bodies or organizations;

1.2.5 To sponsor, arrange or provide facilities for conferences and seminars;

1.2.6 To establish departments within the Institute for the organizations and administration of its work and activities;

1.2.7 To conduct examinations and grant awards of DIT certificates as approved by the National Council for Technical Education (NACTE);

1.2.8 To arrange for publications and general dissemination of material produced in connection with the work and activities of the Institute;

1.2.9 To engage in self-reliance activities for effective financing and promotion of entrepreneurship;

1.2.10 To establish and foster closer cooperation with the universities, technical colleges and other institutions of higher learning and promote international cooperation with similar institutions;

1.2.11 To do all such acts and things and enter into all such contracts and transactions as are in the opinion of the Council expedient or necessary for the proper and efficient discharge of the functions of the Institute.

2.0 VISION AND MISSION

The vision and mission are as follows:

2.1 VISION

The vision of Dar es Salaam Institute of Technology (DIT) is to become the leading technical education institution in addressing societal needs.

2.2 MISSION

The mission of Dar es Salaam Institute of Technology is to provide competence based technical education through training, research, innovation and development of appropriate technology.

3.0 FINANCIAL SITUATION OF THE DIT

The SWOC analysis of DIT as presented in the Corporate Strategic Plan, (CSP) 2003/4 - 2017/18 was carried out in order to determine the strengths, weaknesses, opportunities and challenges of the Institute. One of the findings of the SWOC exercise was the inadequacy of resources for successfully exercising the functions listed above: enhancement of quality of all prime outputs, continuous enhancement of efficiency and expansion of student enrolment. Financial Resources have not been forthcoming in right quantities and frequencies. The Institute is running at a deficit that had accumulated to TZS 11.8 billion as at 30th June, 2016. Due to this deficit, the Institute has never been in a position to place any resources in any income yielding assets (investments).

The deficits have been caused by the overdependence on the central government budgetary allocations. The Institute has prepared a concept towards its expansion and training consolidation strategy that echo the National Five Year Development Plan 2016/17-2020/21 that envisages nurturing Industrialization for Economic Transformation and Human Development. Under this strategy, DIT aims at doubling enrollment from the current 3,755 to about 7,000 students by 2020/21 and it also plans to relook into training methodology by introducing teaching factory and incubator methodologies in addition to the training centre. The aim of this methodology is to integrate teaching and practice so as to link students with real situation on the ground and hence improve employability and productivity in the SMEs. The cost for the entire expansion programme which shall require quality human resource, adequate teaching space, infrastructure, and machinery is estimated to cost USD 180.8 million (This is equivalent to over TZS 397.8 billion). This cost excludes the costs of plots acquisition as well as costs of machineries and facilities.

This amount of money is expected to be sourced mainly from government and donor community. This is a challenge as out of about TZS 3.8 trillion which was allocated to the education sector in 2015/16 government budget, about seventy percent (2.6 trillion) went to primary and secondary education, only less than 100 billion was allocated for technical and vocational education training. Considering the current move to offer free basic (primary and secondary) education, it is highly likely that reprioritization by the government may be needed for the DIT to access such sums of money from the government to implement this ambitious transformation programme. There are several factors explaining the accumulation of deficits; some of them include inability to raise tuition fee level in the face of rising operational expenses, inability of the government to release funds as budgeted by the Institute, inadequate resources from other sources such as consultancies, grants, etc. Seventy percent (70%) of revenue to the Institute comes from government while only thirty percent comes from other sources including students' fees. Almost the entire amount (the 70 percent) from Government is disbursed to DIT through salaries credited directly into individual accounts of members of staff of the DIT. Operational expenses are greater than revenue to an extent that the Institute operates at a deficit and become unable to honor its obligations timely. Despite these deficits, the potential of the Institute to generate cash is huge due to its strategic location at the Central Business District (CBD) specifically the main campus of Dar es Salaam.

DIT owns land approximately 16 acres at the CBD which is quoted in its books of accounts at TZS 7.7 billion. Considering the location, this value is highly understated. Market forces are likely to place a higher value to this land, and can be as high as TZS 64 billion for land only at the main campus. This is an area to look at by involving financial institutions in unlocking this very understated potential. The premises can be modernized so as to be used more efficiently to generate resources for the institution. Facilities that could be provided given its location include training rooms and theaters, hostels for DIT students and those of other institutions, conference/board rooms, parking slots, specialized stores, consultation rooms, workshops, laboratories etc. All these could be provided in high rise structures that could be designed and financed through commercial loans from financial institutions (local and foreign), through PPP, joint venture arrangements, establishing the construction company or operationalise the already registered DIT Company Ltd, etc. Initial steps should include a detailed feasibility study and valuation of the property.

4.0 THE INVESTMENT POLICY

4.1 OVERVIEW

This Investment Policy is formulated in accordance with the DIT Establishment Act No.6 of 1997 and other national plans and directives. The policy is intended to enhance Institute revenue so as to modernize existing facilities and introduce new ones, fund research activities and improving the general service provision. The policy is designed to maximize rate of return subject to policy constraints with respect to risk, liquidity and diversification of investments. Funding for these investments shall include but not be limited to grants, loans, donations acceptable to Institute Council and Government. Use shall also be made of accumulated funds within the Institute system.

4.2 PURPOSE OF THE INVESTMENT POLICY

The Policy provides guidelines within which the Institute investment portfolio is to be effectively and ethically maintained, managed and enhanced for the benefit of Dar es Salaam Institute of Technology. It specifically seeks to:

4.2.1 Establish clear understanding of the Institute investment goals and objectives;

4.2.2 Define and assign responsibilities for investing activities;

4.2.3 Offer guidance and define the scope of parties involved in investment undertaking

4.2.4 Ensure prudent management of institute assets according to agreed standards

4.2.5 Consistent with the laws of the government of Tanzania, and
4.2.6 Establish benchmarks for evaluating results.

4.3 INVESTMENT POLICY GOAL

The goal of this Investment Policy is to enable Dar es Salaam Institute of Technology to attain financial sustainability.

4.4 OBJECTIVES OF THE INVESTMENT POLICY

Investments shall be made with the following objectives:

a) Innovatively improve Institute revenues using secured means;
b) Introduce new services as well as improving and modernizing existing services (hiring the cafeteria using meter square), and
c) Improve learning and research environments.

4.5 SCOPE

The Investment Policy shall cover short, medium and long-term investments.

Short Term: The length of time during which the Institute's stock, bond or any other liability is held before it becomes a long term investment. Normally, this will be a period of one year and below within the annual budgetary cycle.

Medium Term: Depending on the type of security under consideration, a medium term position will range from two to ten years. During this period, the Institute will consider investments which include mid-term economic infrastructure and other development reforms with emphasis on transfer of technology and training to realize increased returns.

Long-Term: This is the period of time during which the Institute will reallocate resources and generally re-establish equilibrium. This period focuses on corporate and other investment-grade securities with an average effective duration of more than 10 years. The results of such reallocation may be realized in the next 20 to 30 years.

4.6 INVESTMENT GUIDELINES

This section outlines the general investment principles, authorized investments, prohibited/unauthorized investments as well as the use of proceeds.

4.6.1 GENERAL INVESTMENT PRINCIPLES

Investments shall be guided by the following key principles:

(a) Safety and preservation of the principal.
Safety and preservation of the principal is the foremost objective of the Investment Policy. Investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio.

(b) Sufficient Liquidity.
The Investment Portfolio shall remain sufficiently liquid to meet all operating requirements.

(c) Maximization of yield on the portfolio.
The investment portfolio shall be designed with the objective of attaining a market rate of return, taking into account the investment risk constraints and liquidity needs.

(d) Public trust from prudent investment activities.
All participants in the Institute investment process shall seek to act responsibly as custodians of public trust. Investment

officials shall avoid any transaction which might damage public confidence.

(e) Investments shall be made with the aim of enhancing Institute revenue

(f) Investment can be both national and international

(g) Investment funds shall be diversified so as to minimize the risk.

(h) Investment returns will be measured on the basis of total return; that is the aggregate return from capital appreciation, dividend and interest income

(i) Officers and employees involved in the investment process shall refrain from personal business activity that could conflict with the proper execution and management of the investment program, or that could harm their ability to make impartial decisions.

(j) For each investment, there should be a cost-benefit analysis prior to investment.

4.6.2 AUTHORIZED INVESTMENTS

The following shall constitute eligible investments and the possible funding sources under this policy. These will be updated from time to time as the need arises.

(a) Liquidity related investment which will include the following:

- Treasury Bills
- Shares
- Bonds
- Any other short term investment that may arise

Source of Funds: *Excess balance, pension funds and any other that may be identified by the Institute.*

(b) Capital Investments which shall include the following:

- o Academic/ buildings

Source of Funds: *donations, fees and borrowing*

- o Residential/students halls

Source of Funds: *Build Operate and Transfer (BOT), Borrowing, donations and fees*

(c) Service providing facilities

- o Privatization of the management of halls of residence;
- o Sports facilities/ complexes;
- o Theatre/conference facilities;
- o Student center/ Cafeteria (outsourced catering services)
- o Banking facilities
- o Day care centre
- o Build and Contract the management of the Primary School
- o Parking services

Source of Funds: *Build Operate and Transfer (BOT), borrowing, donations and pre paid rent.*

(d) Developing commercial Units at DIT Research Centres

- o DIT Mwanza Campus Leather Research Centre
- o DIT Main Campus Technology Transfer Research Centre
- o DIT Myunga Campus Mining Research Centre

Main concern: *to separate the teaching and the commercial part of these research centers and to outsource the management team outside the campus.*

(e) Cost-Cutting investments through:

- o Stationery (Recycling)
- o Water harvesting
- o Solar energy
- o Biogas, through human waste

Water harvesting, solar energy and biogas shall be funded through the existing budget while the paper plant shall be financed by means of a joint venture arrangement with private enterprises.

(f) Technical expertise where the Institute has a comparative advantage

- o Department / Discipline- based consultancies

Source of Funds: *by department budgets, to establish a policy on percentage of tuition for investment in technical expertise.*

(g) Redesign off Campus estates
Develop hostels/hotel/shopping complex on the Institute land at Chang'ombe and Mbezi – Kunduchi Kilongawima.

Source of Funds: *Private Sector Investment, endowment fund and BOT*

4.6.3 PROHIBITED/FORBIDEN AREAS

Institute resources shall not be invested in volatile risky business as identified by the Investment Unit. These include but are not be limited to:

- o Trading in merchandise,
- o Transport,
- o gambling activities,
- o Securities in companies not listed on the security exchange for short term investment and
- o Socially undesirable commodities/services.

4.6.4 USE OF PROCEEDS

The proceeds from the Institute investments shall be used for:

- o introducing modern facilities,
- o funding research activities,
- o improving general service provision,
- o re-investment and
- o Other areas as determined by the Investment Advisory Committee.

The proportions of the proceeds to be spent on each of the above areas shall be determined by the Investment portfolio in consultation with the Investment Advisory Committee.

4.7 POLICY ISSUES, STATEMENTS AND STRATEGIES

4.7.1 Funds to run the institute.

4.7.1.1 Policy Statement

The management of finances and attendance of sustainable financial resources and assets/sources of funding including human resources shall be enhanced by the Institute.

4.7.1.2 Strategies

i. Attract third party investments adhering Public Private Partnership (PPP), e.g. hiring of DIT facilities particularly in the hostels, workshops and laboratories.
ii. Promote the marketing of Institutes activities.
iii. Improving the organization of marketing and public relations activities.
iv. Foster a mechanism in place that ensures efficient and effective allocation of resources to the various activities of the Institute.
v. Rehabilitate, furnish and commercialize the available workshops, laboratories, classrooms, seminar rooms, etc when they are not in use with DIT students and staff. The institute shall lease them to a third part firm or person to run the projects.
vi. Construct, furnish and commercialize the new workshops, laboratories, classrooms, seminar rooms, etc when they are not in use with DIT students and staff. The institute should lease them to a third part firm or person to run the projects.
vii. Operationalise the registered DIT Company Limited and search for income generating works in the field.
viii. Commercialize flagship innovations including the Super Computer available at DIT.
ix. Find possibilities to invest in fixed income assets which includes cash, fixed deposits in financial institutions, treasury securities, unit trusts, promissory notes, corporate bonds and loans.
x. Find possibilities to invest in equities (both listed and non listed) and
xi. Find possibilities to invest in landed property.

4.7.2 Quality research, publications and consultancies

4.7.2.1 Policy statement

Research, consultancy and community services shall be improved.

4.7.2.2 Strategies

i. Promote and sustain advanced and applied research in the institute to contribute to national economic development.
ii. Develop and facilitate research links and collaborations with national and international academic institutions.
iii. Facilitate effective administration and control of research and development undertakings.
iv. Establish and promote close research and consultancy linkages with Government and private sector.
v. Promote contracted research programmes.
vi. Improve ability of the Institute to offer community services.
vii. Promote partnership with industry.
viii. Research environment and working condition to foster consultancies improved.
ix. Establishing routine relations with former students (alumni) and staff.
x. Strengthening the administration of external links.

4.7.3 Competent technical human resources in the country.

4.7.3.1 Policy Statement.

Artisans, technicians and engineering programmes shall be expanded.

4.7.3.2 Strategies

i. Offering artisan, technical and engineering programmes that reflect growing sectors of employment, individual and community aspirations like ICT, energy, and industries to all three campuses.
ii. Review and strengthen existing technicians, undergraduate and postgraduate programmes in line with national needs and global trends and realizing the recommended balance of engineers, technicians, artisans of 1:5:25.
iii. Attract more privately sponsored students.

4.7.4 Innovation in teaching methodology and technology transfer.

4.7.4.1 Policy statement.

The Institute shall progressively improve teaching methodology in response to market labour demands.

4.7.4.2 Strategies

i. The Institute proposes a teaching methodology that embodies three components i.e. training centre, teaching factory and incubation.
ii. The Institute should promote entrepreneurial technology transfer.

4.7.5 Provision of social services to staff and students.

4.7.5.1 Policy statement

i. The Institute shall improve provision of social services to its staff and students.

4.7.5.2 Strategies

i. The Institute should identify all spaces available for social services and lease them.
ii. The Institute should collaborate with service providers to make sure all quality services are available.

4.7.6 Resources for establishing new campuses.

4.7.6.1 Policy statement

The Institute shall expand its services strategically.

4.7.6.2 Strategies

i. The Institute should find financiers of the established campuses and other expansions apart from Government subvention.
ii. The Institute should establish new programmes related to priority sectors of the country.
iii. The Institute should ensure that standard staff/student ratio is maintained.
iv. The Institute should find local and foreign development partners for collaboration of several ideas.

4.8 INVESTMENT PHYLOSOPHY

Financial adequacy is the key for quality technical education. Adequate funding enables the institution to offer competence-based technical training and conduct research activities, which are the keys for delivery of quality technical education. DIT understands that it is through availability of resources, it will be able to fully exploit its innovative potential.

4.9 THE INVESTMENT PORTFOLIO FOR THE DIT

A typical portfolio of DIT like of any other higher learning institution will have a mixture of assets mainly Fixed Income Assets (FIA), Equities and Property. Each of these asset classes has its own characteristics which distinguish it from the other assets. The mixture is required to balance the need for return maximization, liquidity and risk minimization.

4.9.1 ASSET ALLOCATION

The Institute shall be eligible for Investments in the following assets:

(i) Fixed Income Assets: This group shall include cash, fixed deposits in financial institutions, treasury securities, unit trusts, promissory notes, corporate bonds and loans.
(ii) Equities.
(ii) Property.

Percentage allocation limits of resources in each asset class shall be made and shall be reviewed periodically to reflect developments in the market but shall be guided by the investment principles as described here under.

4.10 DESCRIPTION OF EACH ASSET CLASS

4.10.1 FIXED INCOME ASSETS:

This is a major class of assets that will help DIT manage its liquidity and therefore enable smooth running of the institute. It is comprised of cash, bank deposits (both short and long term), treasury bills, notes, unit trusts, promissory notes and bonds, corporate bonds, loans, etc. The DIT will keep cash in current account enough to cover weekly expenditures and any excess will be placed in any interest earning instruments named above. Selection of the instrument shall depend on the expenditure projections that will be approved by an appropriate management committee.

4.10.2 EQUITY:

Equity is the ownership of shares in another entity. DIT would need to hold shares in some ventures in order to help remove bottlenecks in financing. Joint venture projects are some of the examples of equity holdings, where a partner(s) agree to part finance with the DIT for the benefits of all especially in major projects. This type of equity is non-listed and shall be limited to public, private and partnerships projects/ businesses where DIT feels it has no capacity to go on its own. Traded shares in the stock markets shall also be part of investments assets for DIT to hold in its quest to bolster its revenues. The advantage of listed shares is that they can be sold at any time the Institute feels or there are un-expected events that need immediate expenditures or there is significant share appreciation to the extent that the DIT feels that it could have a gain out of selling instead of continued holding. Otherwise it will receive dividends as shall be declared by the investee companies. Considering the need for transparency and professionalism in this area, the DIT through its tender board shall appoint a stock broker registered at the relevant market.

4.10.3 PROPERTY:

In order to see the benefits of this asset class, the DIT shall carry out a valuation, consistent with the requirements of the Accounting Standards, to ascertain the value of its landed assets and shall subsequently prepare a business plan to turn around this major class of asset into cash generating Investment. There shall be no landed property that will remain un-attended to. For instance, the DIT main campus; the turnaround will include demolishing old structures and remodeling the environment by putting up a mixture of facilities such as commercialized hostels for students and non students, seminar, board and meeting rooms for health diagnostic facilities, business centres, day care centres, parking lots, etc. These facilities shall be managed by a professional property manager, whose rewards shall be worked out as a percentage of collections made per a given period. DIT believes that it will offer these facilities commercially but competitively, considering that its cost of putting them up will be lower than any other property developer in the neighborhood by the extent of the value of land which, unlike other developers, DIT will not purchase. Mode of financing shall be determined in the business plan. **The Landed property situated at Mbezi Beach** shall be redesigned into a world class technology incubator or innovation, where major discoveries and innovations shall be nurtured. For instance, electronics repairs will also see its workshops in this property. Design and financing of this centre shall involve stakeholders including public and private companies. There should be an incentive to those that will participate in the design and construction of such a centre, in terms of discounted fees when they bring their technology staff for training.

The Institute proposes teaching methodology that embodies three components i.e. **training centre, teaching factory and incubator,** which complement to each other. The concept of the teaching factory, for instance, has its origins in the medical sciences discipline and specifically in the paradigm of the teaching hospitals. It aims at integrating the learning and working environments from which realistic and relevant learning experiences arise. The configuration layout of the factory-classroom concept will follow a modular approach to allow flexibility on its application and operation. The modularity of a teaching factory concept could be presented in four categories, namely factory, curriculum/study content, delivery mechanism and courses. The establishment of the technology incubators at DIT Campuses aims at accelerating commercialization of scientific research results and technologies developed both from the Institute as well as from local R&D institutions and SMEs in the vicinity. The incubator provides space, partnerships and networks to build a national community in which project/research students, innovators, entrepreneurs, scientists, technologists, professionals and investors can continuously exchange knowledge, share best practices, develop innovative businesses and expand their networks both locally, regionally and globally.

Additionally, the teaching factory which is envisaged to operate as a fully fledged production industry with semiautonomous structure will have the following significance to Tanzanians:

i. The factory will provide rooms for employment to the youths and women in various sections. Hence, it will reduce the rate of unemployment in the region responding to the mission of 5th phase Government of the United Republic of Tanzania of reducing unemployment rate and eradicating poverty among its people.
ii. Presence of a factory will ensure availability of reliable market of their several products. This means that Tanzanians will increase their incomes through selling these products to the factory as row materials.
iii. Availability of quality products (e.g. incubation machines, motors, furniture, bricks, etc) from the Teaching factory at the campus on a reasonable price. As a result they will no longer depend on second hand products or new ones imported from abroad.
iv. Learning process will become more effective for students especially entrepreneurs students from the neighboring regions as it exposes them into a realistic environment.
v. It will improve the quality of teaching/learning and the attitude and mindset of staff and students. Students will relate closely

to the occupational aspects of their studies and reduce the gap between industrial needs and training.

vi. Researchers will fully utilize the use of the Teaching Factory coupled with a technology incubator for research and educational work and the results will be used to solve emerging issues in Tanzania.

vii. The factory will open up active collaboration with the industries which will maintain relevance and thus allows everybody to benefit from the latest technologies.

viii. Close collaboration with the industry will enable staff and students experience the real-life projects within time and budget constraints while observing industry standards.

ix. The factory coupled with technology incubator will promote Small and Medium Size Enterprises (SMEs) in Tanzania.

x. The presence of a teaching factory will attract the attention of the multinational companies to invest in several products manufacturing and technology in Tanzania.

Most investors in property do consider the residual value of land as addition to the utility of the building, however, for DIT, the key determining factors in this type of Investment shall be the following:

(i) Pay Back Period (PBP)

(ii) Net Present Value (NPV) and

(iii) Internal Rate of Return (IRR).

The PBP shall be reasonable enough to pay for the investment cost. Whereas the funds have been borrowed, to create a property, a payback period should be consistent with the duration of the loan. Whereas funds are from own resources or government, the PBP should not be longer than the period that the property will need major renovation.

NPV shall be significantly positive. Whereas two properties are considered, the one with high NPV will be implemented first.

IRR shall be significantly greater than the obtaining returns in the market; and that, whereas two properties are brought for consideration, the one with higher IRR will be implemented first.

4.11 GUIDING INVESTMENT PRINCIPLES

Investments shall be guided by the following three key principles:-

4.11.1 Safety and preservation of capital: safety of the capital is the foremost objective of the Investment Policy. Investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio.

4.11.2 Liquidity: The Investment Portfolio shall remain sufficiently liquid to meet all operating requirements all the time, but without affecting returns.

4.11.3 Maximization of return on the portfolio: The Investment portfolio shall be designed with the objective of attaining a market rate of return, taking into account the Investment risk and liquidity needs.

4.12 SOURCES OF REVENUE FOR INVESTMENTS

i) The council of the Institute shall set fees commensurate with the needs of offering practical education and carrying out research activities. At present, the Government pays insignificant fees for its students, leaving a larger burden to private students who insignificantly become affected by the insufficient facilities offered by few resources. The government intervention has always been, however, suppressing the fees level rather than raising it.

ii) Government subvention.

iii) Grants as shall be permitted.

iv) Contributions and funds raising events to support specific talents and/or activities of the Institute.

v) Consultancy fees: The consultancy Bureau (ICB) shall be given targets of revenue per annum; this shall include reworking on the formula that distributes fees across participants, taking into account that the Institute is the one responsible for the consultancies and that all employees fronted to carry out consultancy are full time employees of the DIT.

vi) Renting facilities: There shall be resources from renting: conferences/board rooms, meeting rooms, and Residential apartments for students and non-students, Libraries, Parking lots, Day care facilities.

vii) Suppliers (creditor days) shall be formalized to bring value to the Institute.

viii) Contributions from successful x-DIT students (Alumni) who feel that their present successes have a foundation at DIT. Massachusetts Institute of Technology (MIT) in US is said to be a beneficiary of this kind of arrangement.

5.0 STRUCTURE AND RESPONSIBILITY

This section of the policy defines the overall structure of the investment management programme.

5.1 INVESTMENT ADVISORY COMMITTEE (IAC)

There shall be an Investment Advisory Committee appointed by the Council composed of the following:

Deputy Principal Finance & Administration (DPAF), Chief Accountant, Head Legal Unit, Chief Planning Officer, and may coopt two professional members from the Industries, Tanzania Private Sector Foundation (TPSF) and Tanzania Investment Centre (TIC). The committee shall be chaired by DPAF and Chief Planning Officer will be its secretary and shall be meeting once in a quarter of the year.

The IAC shall be responsible for overseeing and ensuring that this Investment Policy established by the Institute Council is implemented and adhered to. The Committee shall operate in an evaluative and advisory role providing advice to the Institute Council with respect to all aspects of the investment programme, including but not limited to investment strategies, policies and procedures, investment performance and external investment advisors.

5.2 INVESTMENT SECTION

5.2.1 ORGANIZATION STRUCTURE OF THE INVESTMENT SECTION

The Institute investments shall be managed by an Investment Section headed by a Planning and Investment Manager answerable to the Principal. The investment section shall diligently implement this Investment Policy. There shall be an Investment Coordinator to manage all investments. The coordinator will be in the office of Planning and Investments which will be headed by a manager. The Investment section shall provide a quarterly investment report to the IAC. The report shall contain:

i. Asset values,
ii. Investment returns versus performance benchmarks,
iii. Forward cash flow statements,
iv. The investment manager's compliance with the Investment Policy & Guidelines Statement,
v. The portfolio's investment performance and risk level,

vi. The current and proposed investment strategy

vii. The unit views concerning the economy and the securities markets with focus on the likely impact on the unit's strategies and the portfolio's performance and

viii. Recommendations on the way forward regarding investments.

At the beginning, there shall be no investment coordinators in the campuses until when they will be well established. The council will deliberate deployment or employment investment coordinators in the campuses so as to decentralize investment activities.

Everything about investment will be centrally managed by the office of manager for investments and planning supported by the investment coordinators as shown in the organization structure in figure 1 below.

Organization Structure of the Planning and Investment Unit

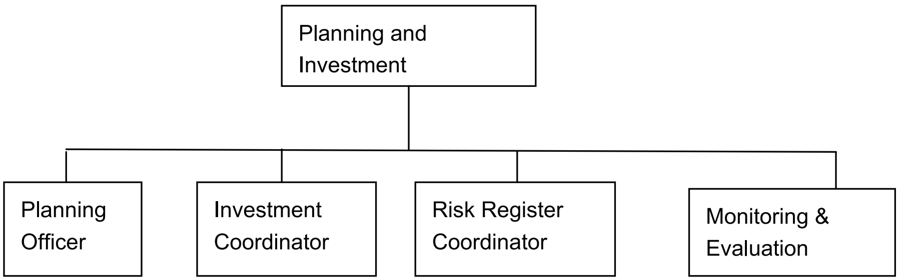

Figure 1: Organizational Structure of the Planning and Investment Unit

5.3 THE ROLES OF THE MANAGER OF PLANNING AND INVESTMENTS UNIT

There shall be a manager of the Planning and Investment Unit responsible for the overall management of the Unit. The manager shall be responsible for all aspects of managing and overseeing the Institute's investment portfolio. On an ongoing basis, the manager shall:

i. Implement the overall investment strategy;
ii. Annually develop and communicate to the IAC an appropriate strategy to meet the objectives of this Investment Policy;
iii. Advise the IAC regarding searches for financial advisors;
iv. Provide a monitoring and measurement programme which will permit evaluation of the performance of the investment managers and financial advisors;
v. Monitor the asset mix and allocate assets of each investment strategy within the Investment Policy guidelines;
vi. Identify appropriate investment opportunities;
vii. Invest the assets in a prudent manner and consistent with established guidelines;
viii. Identify appropriate investment/financial advisors;
ix. In consultation with the Institute Chief Accountant, identify any unutilized funds from Institute units to be pooled;
x. Provide the IAC with quarterly performance reports;
xi. Provide the IAC with an annual review of the Investment Policy Statement including an assessment of the current asset allocation and investment objectives;
xii. Provide such other information pertaining to the investment programme as may be reasonably required for the attainment of the objectives of this Investment Policy.

5.3.1 ROLES OF INVESTMENT COORDINATOR

There shall be an investment coordinator whose responsibilities shall include but not limited to the following:

i. Acknowledge in writing the acceptance of the objectives, guidelines and standards of performance as defined in the Investment Policy;
ii. Execute investment transactions within this Investment Policy;
iii. Be available to meet with the IAC at least once every quarter and be prepared to discuss any matters pertaining to the management of the Invested Assets;
iv. Report on a timely basis monthly investment performance results to the Director;
v. Provide regular quarterly reports as directed by the IAC, describing portfolio holdings at both cost and market value, purchases, sales, income, and performance, both gross and net of fees compared to the agreed upon benchmark;
vi. Communicate any major changes in economic outlook, investment strategy or any other factors that affect investment or investment objectives to the director;
vii. Inform the director of any qualitative changes in the portfolio management, personnel for cases of joint ventures and investment portfolio;
viii. Provide the director with any other information that may affect the Institute's investments as outlined in the general investment principles.

5.4 MONITORING AND EVALUATION OF INVESTMENTS

There shall be coordinator of monitoring and evaluation of investments of the Institute. The coordinator will be in the office of Planning and Investments of the institute headed by its manager. The coordinator will assist the unit in the oversight of the management of the invested assets.

5.5 CONTROLS

As part of internal control measures, there shall be an annual independent review by an external auditor to ensure compliance with policies and procedures.

5.6 INVESTMENT AND WORK PLAN FORMAT

Project Identification	Prospective Partners(s)	Intervention	Expected Output	Initial Requirement

6 CONCLUSION

The DIT does not have liquid financial resources at present having accumulated deficits amounting to TZS 11.8bn/- as at 30th June, 2016. However, DIT's strategic locations give it an advantage in attracting resources for investments. For instance the value of land it holds at the main campus in Dar es Salaam is TZS 64 billion. Including the buildings, it has accumulated worth of property amounting to over TZS 100 billion. A plausible approach will be to relook into how this with a view of unlocking it so as to allow cash to flow towards financing various plans and programmes. This can be done within the framework of the law that establishes the Institute. Under the Dar es

Salaam Institute of Technology (DIT) establishment Act No.6 of 1997, sec.3(1), the DIT has the power to lend and to borrow any sum that it requires for its purpose. It is capable of entering into contracts and has power to perform all other acts and things which are necessary for the proper performance of its functions or which may be performed under this Act.

7 RECOMMENDATIONS

The DIT Management recommends to the council to approve that the Institute should implements all policy statements and strategies proposed in this policy so as to address issues stated and improve internal generated income.

8 REFERENCES

- Concept Note for DIT Expansion Plan;
- DIT Corporate Strategic Plan 2003/2004 - 2017/2018;
- The DIT Establishment Act No.6 of 1997;
- DIT Prospectus 2015/2016;
- Public Private Partnership Act No.18 of 2010 and Regulations;
- Public Investment Manual.