# THE UNITED REPUBLIC OF TANZANIA MINISTRY OF EDUCATION SCIENCE AND TECHNOLOGY





# THE NELSON MANDELA AFRICAN INSTITUTION OF SCIENCE AND TECHNOLOGY (NM-AIST)

THE RESEARCH AND INNOVATION POLICY (RaIP)

December 2023

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### STATEMENT BY THE VICE CHANCELLOR

The Nelson Mandela African Institution of Science and Technology (NM-AIST) is committed to generating technologies that meet societal and industrial needs. *The Research and Innovation Policy 2023* reflects the commitment of NM-AIST to the coordination of research and grants, incubation of innovative ideas and start-ups, intellectual property protection, acceleration and commercialization of technologies. The policy envisions strengthening the overall research and innovative ecosystem, fostering science, technology, and innovation-enabled entrepreneurship, and improving participation in the research and innovation ecosystem. Collaborations between grassroots innovators and scientists will be facilitated through research projects, fellowships, incubation, and scholarships.

Research and Innovation is one among the key drivers for economic growth and human development. Investments in research, technology development and innovation creativities breed significant societal economic impacts. Research and Innovation produce new knowledge, strengthen the workforce, increase economic competitiveness, and enhance quality of life and social well-being.

In line with this impact, the Policy is a milestone for NM-AIST in creating a favourable environment for technology generation, conducting research, creating innovation, protecting intellectual properties, technology acceleration and commercialization. Being a research-intensive institution, the Policy is a valuable tool for the NM-AIST and non-NM-AIST community for economic growth and sustainable development of NM-AIST, innovators and the society at large.

I call upon everyone to make use of this instrumental Policy to achieve the desired results for the advancement of our institution.

Prof. Maulilio John Kipanyula

The Vice-Chancellor

December 2023

# LIST OF ACRONYMS AND ABBREVIATIONS

AIST African Institutes of Science and

Technology

BuSH The School of Business Studies and

Humanities

DRI Directorate of Research and Innovation

DVC-ARI Depute Vice Chancellor – Academic,

Research and Innovation

GR Genetic Resource

IMO Incubation Management Office

IP Intellectual Property

IPMO Intellectual Property Management Office

IPR Intellectual Property Right

ITK Indigenous Tradition Knowledge

ITKI Indigenous Knowledge and Technology

**Initiatives** 

NM-AIST Nelson Mandela African Institution of

Science and Technology

RaIP Research and Innovation Policy

RGMO Research and Grant Management Office

SETI Science, Engineering Technology and

Innovation

TAMO Technology Acceleration Management

Office

# **DEFINITIONS**

commercial value. Intellectual Property includes inver literary and artistic works and symbols, names and images u	ntions,
literary and artistic works and symbols, names and images u	
	sed in
trade.	
Intellectual Property Right Refers to enforceable rights over creations of the mind,	which
gives the creator exclusive rights to exploit and benefit from	n their
creation, and prevent others from making unauthorized	use of
their property for a limited period, in exchange of	of the
disclosure of the creative work	
Traditional knowledge Refers to any knowledge originating from a local or	
traditional community that is a result of intellectual	
activity and insight in a traditional context, including	
know-how, skills, innovations, practices and learning,	
where the knowledge is embodied in the traditional	
lifestyle of a community, or contained in the codified	
knowledge systems passed on from one generation to	
another. The term shall not be limited to a specific	
technical field and may include agricultural,	
environmental or medical knowledge, and knowledge	
associated with genetic resources.	
Spin-off Refers to companies/organisations to leverage	their
existing strengths and knowledge to explore new ma	rkets,
diversify their offerings and capture additional values	from
their intellectual property or research	
Start up Refers to newly established companies/organization	ation
focused on developing and introducing innov	ative
products, services or business models to the market.	

Return on Investment	Abbreviated as RoI and sometimes known as return on
	costs, is a ratio between net income and investment used a
	performance measure to evaluate the efficiency of an
	investment or to compare the efficiencies of several
	different investments
Innovation	For NM-AIST, Innovation refers to a process where a
	product or a service is renewed and brought up to date by
	applying new processes, introducing new techniques, or
	establishing successful ideas to create new value. The
	creation of value is a defining characteristic of innovation.
Commercialization	Refers to the process of managing or running inventions
	and innovations developed at the institution principally for
	revenue generation (financial gain).
Revenue	Refers to money generated from business operations. It is
	calculated as the average sales price times the number of
	units sold. For NM-AIST, revenue refers to total
	collections from its business operations of teaching and
	learning, research and innovation, outreach services,
	commercialization of innovation and other activities.
Genetic Resources	Genetic resources are materials of actual or potential value.
	Genetic materials are defined as "any material of plant,
	animal, microbial or other origin containing functional
	units of heredity. Some GRs are linked to traditional
	knowledge (TK) through their use and conservation by
	indigenous peoples and local communities, often over
	generations, and through their widespread use in modern
	scientific Research. Examples include medicinal plants,
	agricultural crops and animal breeds.
	1

Institution	Means the Nelson Mandela African Institution of Science
	and Technology
Technology Transfer	Refers to a process of disseminating technology from its origin to wider distribution among more people and places. It is a subset of industrialization and commercialization where great emphasis is required to transform the technology or intellectual property into a sellable form ready forthe market.
Incubation	It refers to a process at the NM-AIST Innovation-Based Incubation Center needed to support inventors and innovators in transforming their inventions and innovations into viable business ventures.

### **CHAPTER ONE: INTRODUCTION**

### Introduction

The chapter introduces the NM-AIST background, goal, mission, vision, and core values which the Research and Innovation Policy 2023 (The Policy) envisioned to implement. The chapter also explains the background of the institution, mission, vision, the guiding principles and the rationale of the policy.

### 1.1 Background

The Nelson Mandela African Institution of Science and Technology (NM-AIST) was established in 2009 under Tanzania's University Act, 2005. It is one in a network of Pan-African Institutes of Science and Technology located across the continent. The African Institutes of Science and Technology (AIST) concept was conceived by the former South African President, Nelson Mandela, as a mechanism to develop the next generation of African scientists, engineers and technologists, who will impact the continent's development through the application of Science, Engineering, Technology and Innovation (SETI).

To accomplish SETI, NM-AIST conducts research and innovation activities in various scientific disciplines to generate the knowledge base and justification for every endeavour in technology transfer. These activities are guided by a well-formulated Research and Innovation Policy. The overall purpose of the research and innovation conducted at NM-AIST is to solve societal and industrial challenges and needs, and to foster economic development.

#### 1.2 Vision

To become a centre of excellence in Science, Engineering, Technology, and Innovation for Humanity's sustainable development.

### 1.3 Mission

To create a hub of inventions and innovations, scout, and nurture inventors/innovators for enhanced value addition to the society and industry for Tanzania, Africa, and global sustainable and inclusive growth.

### 1.4 Core Values

- Unlocking scholars' transformative potentials
- Cherishing rights, differences, and dignity for all
- Building trust, honesty, integrity, and respect
- Excellence and productivity
- Innovation and accountability

### 1.5 Goal

Is to become a world-class research-based Institution fostering leadership in science, engineering, technology, and innovation, promoting entrepreneurial spirit, and commercializing impactful innovation.

### 1.6 Motto

Academia for Society and Industry

# 1.7 The Rationale of the Policy

The Institution is focused on research, which leads to inventions and innovations. To ensure that these research activities are properly guided, there is a need to address the challenges posed by existing policies, guidelines, and regulations. Harmonizing these elements is essential to reduce or eliminate these challenges.

# **1.8 Guiding Principles**

The Institution operates under the following guiding principles:

- (a) Multi-disciplinary approach.
- (b) Responsiveness to needs and problems of the society and industry.
- (c) Aligning to the National Research and Innovation Agenda.
- (d) Promoting innovation and scientific excellence.
- (e) Aligning to National, Regional, and International standards on research and innovation.

- (f) Mainstreaming Gender and equity in research and innovation.
- (g) Promoting Public and Private Partnership.

# CHAPTER TWO: POLICY GOALS, OBJECTIVES, SCOPE, AND APPLICATION

### Introduction

Science, Technology, and Innovation (STI) are the key drivers for economic growth and human development of any country. The policy envisions strengthening of the overall innovative ecosystem, fostering Science, Engendering and Technology and enabled entrepreneurship, and improving participation of the stakeholders in the research and innovation ecosystem The chapter also explains the background of the institution, mission, vision, the guiding principles and the rationale of the policy. This chapter therefore consists of the Policy goals, objectives, scope, and application of the policy.

# 2.1 Policy Goals

The policy goal is to strengthen the production of top-notch research and innovation at NM-AST. This goal aims to intensify research, incubation, protection of intellectual property and commercialization of technology, IP assets, products, and services.

# 2.2 Policy Objectives

The Policy aims to address the need to apply knowledge in SETI leading to wealth creation and sustainable development, generating technology, protecting invention/innovation and commercialising technologies. Thus the specific objectives of the policy are:-

- (a) To operationalize the function of the offices of Research and Grant Management, Incubation Management, Intellectual Property Management and Technology Acceleration and Management.
- (b) To foster intensive research and generation of technology for society and industrial consumption.
- (c) To manage and coordinate proposal writing to attract funds for the institution.
- (d) To regulate sponsored research for the benefit of NM-AIST and the researcher at large.

- (e) To incubate ideas with potential IP, generate technology and assist in Technology enhancements.
- (f) To protect and manage potential inventions/ innovations in the national, regional, and international arena.
- (g) To provide and foster acceleration of innovation through the creation of startups, techno packs and research parks.
- (h) To foster strategic innovation/ industrial linkages with governmental and non-governmental institutions.
- (i) To commercialise inventions/innovations with potential markets.

# 2.3 Scope and Application

This policy shall apply to all NM-AIST and non-NM-AIST communities in matters related to research, incubation, and protection of innovation/invention technologies acceleration and commercialization, IP Assets, Products and Services.

# CHAPTER THREE: COORDINATION AND MANAGEMENT OF RESEARCH AND INNOVATION

### Introduction

Being a research-intensive institution, NM-AIST is mandated to address industry and society challenges through SETI. Research and Innovation activities at NM-AIST are multidisciplinary whose inter - and intra- coordination requires harmonized coordination and structure.

### 3.1 Policy Issues

The NM-AIST requires a focused enabling environment to operationalize research and innovation. The current situation at NM-AIST lacks clear coordination of research, research priorities, and grants, and does not maintain ethical standards. To address this, it is imperative to coordinate all research and innovation activities and grants, control research priorities, ensure the institution benefits from projects, maintain ethical standards, and disseminate research and innovation results, among other related issues.

### 3.2 Policy Objective

To establish and operationalize an organ and mechanisms for coordinating all research and innovation activities.

# **3.3 Policy Statements**

The NM-AIST through the Research and Grant Management Office (RGMO) shall;-

- (a) Coordinate and manage all research activities from schools, centres of excellence, units, departments, and all stakeholders (Internal and external) working with or affiliated with NM-AIST.
- (b) Coordinate all innovation activities from schools, centres of excellence, units, departments, and all stakeholders (Internal and external) working with or affiliated with NM-AIST.

- (c) In alliance with the School of Business and Humanities (BuSH), facilitate enterprising and business development services of innovation in schools, centres, units, and departments.
- (d) Oversee, review, monitor and approve applications and execution of research, projects, and grants.
- (e) NM-AIST shall charge overhead cost/institutional fees from all projects at/in collaboration with the institution.
- (f) Develop and coordinate the implementation of the Institutional Research Agenda.
- (g) Establish, maintain, and cooperate with strategic research funders, partners, and sponsors.
- (h) Maintain a database of research proposals, projects, workshops, conferences, publications, innovation, and other research-related activities of the institution.
- (i) Coordinate outreach and community engagement.
- (j) Prepare and submit all mandatory reports of research projects.

# CHAPTER FOUR: INCUBATION OF INNOVATIVE IDEAS AND TECHNOLOGIES

### Introduction

In an era of rapid technological advancements and global connectivity, fostering innovation has become imperative for sustained economic development. Innovation-based incubation is a pivotal strategy in nurturing and accelerating the growth of novel ideas, start-ups, and small businesses. Incubation activities are imperative for NM-AIST's operations and strategic plan implementation.

The success of incubators is gauged by sound infrastructure that fosters mentorship programs connecting experienced professionals with emerging entrepreneurs, and a diversity of individual innovators from various backgrounds. It also depends on enhanced channels for collaboration with established industries and providing platforms for showcasing innovations and fostering partnerships to expand market reach.

One of the key elements of the NM-AIST strategic plan is to include incubation management, among other things, to support inventors in transforming their inventions and innovations into viable business ventures. The aim is to bridge the gaps between research, innovation and industrial development through strong links with society and industry for technology transfer. This policy will create a supporting environment for inventors and innovators to create innovative start-ups, business spin-offs and product development through sound incubation programs, mentorship, and linkages.

This chapter elaborates on critical aspects of the policy, addressing key policy issues and articulating a robust policy statement to guide its implementation of incubation activities.

### 4.1 Policy Issue

Although NM-AIST has its incubation centre, clear guidance for dealing with its incubatees, sourcing of incubatees and strategic linkages to other partners in the innovation ecosystem is inadequate. This significantly impacts the operations of

incubation centres and start-ups. Likewise, the regulatory framework that guides ideation to commercialisation and that accommodates an environment that supports innovation and encourages entrepreneurship presents an existing challenge. To ensure success, an incubator depends on the strategic collaboration of the innovation ecosystem, networking and partnerships needed to enhance the overall ecosystem and facilitate knowledge exchange.

# **4.2 Policy Objective**

Establish and operationalize an organ and mechanisms for coordinating all incubation activities.

# **4.3 Policy Statements**

The NM-AIST through the Incubation Management Office (IMO) shall;

- (a) Create a conducive environment and infrastructure that fosters incubation of innovation and start-up, streamlined compliance procedures, and allows for agile and efficient operations.
- (b) Establish and operationalize the incubation management office.
- (c) Create strategic collaborative platforms and collaborations, partnerships between academia, industry, and government, promoting the exchange of knowledge, expertise, and resources to foster innovation up-scaling.
- (d) Create platform(s) for ideation by promoting and fostering an inclusive and diverse innovation landscape.

# CHAPTER FIVE: INTELLECTUAL PROPERTY RIGHTS AND INTELLECTUAL ASSETS MANAGEMENT

### Introduction

Society revolves around dynamic changes taking place in global technology. Intellectual Property Rights (IPR) contributes to the economy through technology transfer and commercialization of innovative products and services. Intellectual Property Protection and management gives rise to legal rights that govern the ownership and exploitation of Intellectual Property (IP).

The NM-AIST's mandate revolves around being a research-based institution, where researchers actively contribute to scientific development, and innovation is a key aspect of the institution's activities. The establishment of an Intellectual Property (IP) framework plays a crucial role in enabling both the institution and the broader society to harness the value derived from innovation. These IP frameworks and systems serve as mechanisms that empower NM-AIST and its inventors/innovators to effectively commercialize their knowledge assets, leading to the acquisition of additional funding sources. NM-AIST recognizes the importance of protecting its IP assets and shall implement vigorous strategies to safeguard, protect and manage its different types of IPR for the benefit of NM-AIST, Inventors/ Innovators and contribution toward the economic development of society. NM-AIST, therefore, shall foster IP management through the protection of innovations, management of conflicts and disputes and enhancing benefit-sharing between NM-AIST, innovators and inventors and other IP-related issues.

# **5.1 Policy Issues**

The coordination of intellectual property and understanding the nature of ownership of IP at NM-AIST is still challenging. The institution has no framework providing clear IP ownership and conflict of interest and commitment in IP. Likewise, ownership impacts on determination of benefit sharing in commercialized IP. The NM-AIST recognizes the

importance of an Intellectual Property Management Office (IPMO) for the effective day-to-day management of IP matters in the institution. Furthermore, NM-AIST recognizes the importance of Genetic Resources (GR), Indigenous Traditional Knowledge (ITK) and material transfer in research activities and IPR, in this regard, the policy safeguards the ITK and GR in the research and innovation ecosystem and stipulates a framework on IP protection and management, ownership and conflict of interest in IP, together with other IP related issues.

# 5.2 Policy Objective

- (a) To operationalize the management of intellectual property rights and intellectual assets
- (b) To establish a framework on IP assets protection and management
- (c) To establish a framework of IP ownership and benefit/revenue-sharing between the NM-AIST and Innovators/Inventors.
- (d) To coordinate the laboratory notebooks provided to school deans in order to facilitate sourcing of innovations and intellectual assets from scholars, innovators, inventors and incubates.

# **5.2 Policy Objective**

- (a) To operationalize the management of intellectual property rights and intellectual assets.
- (b) To establish a framework on IP assets, product protection and benefit/revenue-sharing between the NM-AIST and inventors/innovators.
- (c) To Provide coordination of laboratory notebooks from schools to facilitate the sourcing of innovations and intellectual assets.

### **5.3 Policy Statement**

# The NM-AIST through the IPMO shall:

- (a) Regulates and coordinates all IP emanating from institutional schools, scholars, centres, incubations, departments, and agreements for which NM-AIST is a party, NM-AIST academicians and non-academicians are involved.
- (b) Provide a framework of IP and technology searches are conducted before registration of IP.
- (c) Provides a framework for the protection, management, ownership of IP and Intellectual Assets.
- (d) To ensure economic benefit from IP assets are equitably distributed to the innovators/inventors and the institution in line with this Policy and the Research and Innovation Policy.
- (e) Embrace and cooperate with National, Regional, and international IP institutions in all issues related to IP.
- (f) Manage all confidential information which does not require disclosure for purposes of securing information in Research and Development and registration of IP across all schools, units, incubations, directorates, centres, and all people visiting NM-AIST.
- (g) Safeguard Institutional IP in partnership, linkages benefits and interests.
- (h) Ensure that the use of GRs for research, including research leading to patents, complies with international, Regional, and national laws.
- (i) Ensure that the exchange or transfer of tangible research materials is according to the institutional, national, Regional, and international standards and best practices.
- (j) Ensure IP rights in data and material transferred are not infringed in any way.
- (k) Ensure synergies and complementarity between traditional TIK and conventional science through activities of the Indigenous Knowledge and Technologies Initiatives (IKTI) of the NM-AIST.

(1)	Ensure the protection of indigenous knowledge holders from any infringement of their rights and the misappropriation, misuse, or exploitation of their knowledge.

# CHAPTER SIX: ACCELERATION OF TECHNOLOGY, IP ASSETS AND PRODUCTS

### Introduction

The NM-AIST technology, IP assets and products acceleration shall involve a set of strategies, initiatives, and measures that will be implemented by the institutions to foster and expedite the development and adoption of innovative technologies, processes, and products. The goal is to create an environment that encourages rapid technology transfer to the market. The technology acceleration process at NM-AIST shall involve an effective policy that addresses a holistic approach in various aspects of the innovation ecosystem, aiming to create a dynamic and supportive environment.

# **6.1 Policy Issue**

NM-AIST have various innovations that require acceleration and commercialization, however, there is no policy direction and guideline relevant to acceleration and commercialization of technologies and innovations to market. A successful and productive innovation ecosystem depends on the effective framework for the acceleration of technology, IP assets, services, and products to commercialisation. This requires an environment that enables the fruitful conception of technologies and inventions/innovations for commercialisation. NM-AST shall foster and encourage the commercialization and accelerating innovation to markets.

# **6.2 Policy Objectives**

- (a) To accelerate technology, IP assets, products, and services to commercialization.
- (b) To facilitate strategic linkages and networking of players in the innovation ecosystem for acceleration.
- (c) To facilitate business development support to innovators and inventors' ventures in businesses, start-ups- spin-offs etc.

# **6.3 Policy Statements**

NM-AIST through the Technology Acceleration Management Office (TAMO) shall

- (a) Regulate all activities relating to the acceleration of innovations and technology to commercialisation.
- (b) Facilitate strategic linkages and networking for players of the innovation ecosystem.
- (c) Assist in facilitating business development support to inventors/innovators' ventures in businesses, start-ups-spinoffs etc.
- (d) Facilitate market research and access for innovative products and services by creating platforms connecting innovators with potential customers and supporting market entry strategies.

# CHAPTER SEVEN: COMMERCIALIZATION UNDER NM-AIST INVESTMENT COMPANY

### Introduction

Commercializing innovation requires a strong will and a good knowledge of the market, accelerating sales, soliciting new customers, and exploring new markets. In this regard, the Institution has formed a company titled NM-AIST Investment Company Ltd which stimulates and catalyses innovation and entrepreneurship and commercialization of innovations and technologies created at the institution.

# **7.1 Policy Issues**

The NM-AIST Investment Company Limited was formed to commercialize innovations that are generated at the institution through various pathways. Despite this NM-AIST lacked a clear demarcation between the acceleration of technologies and commercialization in which the investment company is involved. NM-AIST therefore recognized this gap and intends to demarcate and provide a clear coordination between the TAMO and the NM-AIST Investment Company Limited in technology acceleration to commercialisation. NM-AIST shall rigorously commercialize potential innovations and recover a return on investment made from the initial capital invested in the development of innovation. The company is the interface between the investors in innovation and the institution.

# 7.2 Policy Objective

- (d) To commercialize viable and potential innovations and technologes created at the institution.
- (e) To recover a return on investment made from the initial capital invested in the development of innovation.
- (f) To facilitate the formation of spin-offs and start-ups.

# 7.3 Policy Statement

NM-AIST through the Investment Company shall;

- (a) Coordinate and commercialize innovations created at the institution.
- (b) Facilitate the formation of innovation start-ups and spinoffs.
- (c) Spearhead innovation investment, linkages, and marketing.

### CHAPTER EIGHT: REVENUE SHARING AND DISTRIBUTION

### Introduction

NM-AIST recognizes efforts made in developing new technologies and IPs. It is imperative that any revenue accruing from their efforts must be shared equitably according to stakeholders' contributions to the invention/innovation. The NM-AIST recognizes the importance of innovation ownership and benefit-sharing schemes emanating from the commercialization of innovations/IPs. The NM-AIST seeks to ensure that inventors/ benefits from the commercialization inventors receive appropriate of invention/innovation. Thus benefit sharing becomes indispensable. This can best be achieved by proper regulations and balancing the interests of all stakeholders including NM-AIST, government, donors, community, collaborators, and inventors/innovators.

# **8.1 Policy Issues**

Revenue sharing is a key element after the commercialisation of innovation however, revenue sharing was not stipulated in the earlier NM-AIST policies and guidelines. This was caused by a lack of clear stipulations on IP ownership which determines revenue sharing. NM-AIST shall create and put in place a framework and mechanism that facilitates the distribution of benefits that accrue from the commercialization of innovations. NM-AIST shall motivate researchers and innovators to invest their efforts to develop innovation by equitable distribution of revenue.

### **8.2 Policy Objectives**

- (a) To provide equitable sharing of benefits/profit/losses arising from the commercialization of innovations.
- (b) To provide criteria that can be used in the determination of revenue sharing and distributions

# **8.3 Policy Statement**

NM-AIST through the Technology Acceleration Management Office (TAMO) and the NM-AIST Investment Company Limited shall;

- (a) Put in place a framework to determine the ownership criteria of innovation at NM-AIST before revenue sharing from commercialization is distributed.
- (b) Distribute profit and losses emanating from revenue generated from commercialized innovation, IP assets, products, and services to stakeholders of the innovation.
- (c) Ensure equitable distribution of revenue generated from the commercialization of innovations for the betterment of the inventors/innovators and NM-AT at large.

# CHAPTER NINE: FUNDING OF RESEARCH AND INNOVATION ACTIVITIES

### Introduction

Institutional funding for research and innovation activities is paramount. This policy shall elaborate funding opportunities from diverse sources that can help address the funding challenges to research and innovation activities.

### 9.1 Policy Issues

The lack of NM-AIST frameworks for funding research and innovation activities has caused inefficient pursuit of funding sources and coordination at the institution. Since funding is the most critical constraint in research and innovation development, NM-AST shall create a clear framework to facilitate the sourcing and funding of research and innovation activities. The Policy realizes the importance of securing sufficient funding for meaningful research and innovation, knowledge sharing through national and international meetings and contributing to the research and innovation sustainability at NM-AIST. It is envisaged that funding will improve research, innovation, incubation, and technology transfer and product commercialization activities.

### 9.2 Policy objective

To establish and coordinate funding mechanisms for technology transfer in the NM-AIST innovation ecosystem.

### 9.3 Policy Statements

The NM-AIST shall;

- (a) Support and foster innovation, technology transfer, and entrepreneurship.
- (b) Facilitate the funding for research grants application for various research, innovation, incubation, and technology transfer and product commercialization activities.
- (c) Establish a local basket fund to internally finance research areas of priority for the institution and/or the society.

### CHAPTER TEN: HUMAN RESOURCES MANAGEMENT

### Introduction

Research and Innovation activities depend on the availability of human capital and a development plan that fits the running and sailing of the research and innovation at the institution. This chapter provides for human capital issues, objectives, and statements to implement this requirement.

### **10.1 Policy Issues**

The achievement of the NM-AIST's mandate is largely dependent on its ability to attract and retain high-calibre human capital in research and innovation activities. The current framework and organogram do not provide the role of research and innovation personnel and their career growth. In addition, research and innovation activities require an improved working environment, recruitment of qualified human capital and routine capacity building to meet dynamic changes taking shape in research and innovation activities as well as the training and capacity-building programs aligned with the institution's training rosters. NM-AIST shall depend on its human capital development and a well-developed scheme of service which implements the institutional mandate in order to facilitate and coordinate research and innovation activities.

# **10.2 Policy Objective**

- (a) To get and maintain the qualified human capital to implement the institution mandate in the Directorate of Research and Innovation (DRI).
- (b) To provide capacity building and training in dynamic issues of research and innovation.

### **10.3 Policy Statements**

The NM-AIST shall;

- (a) Recruit the qualified human capital to implement the institution mandate in the DRI.
- (b) Provide capacity building on dynamic research and innovation to staff in the DRI.

- (c) Remunerate and provide incentives to researchers/innovators competitively.
- (d) Establish a work-life culture and a conducive environment that promotes high-level research and innovation.
- (e) Promote the development of a skilled workforce equipped with technical, management and entrepreneurial competencies for incubatees and staff.

# CHAPTER ELEVEN: GRIEVANCE REDRESS AND DISPUTE SETTLEMENT

### Introduction

Human interaction in research and innovation activities may bring about misunderstanding, disagreement, competition, and conflicts. Therefore the success of research and innovation depends largely on a harmonious and dispute-free environment. In such instances, the policy sees the need for a statement and objectives to resolve any, grievances disputes and conflicts resulting from implementing this policy and research and innovation activities at NM-AIST.

# 11.1 Policy Issues

NM-AIST currently lacks a specific machinery to handle disputes emanating from research and innovation activities. Likewise, there are no guidelines for conflict management. In this regard, NM-AIST shall provide a framework that will facilitate prompt and equitable settlement of all controversies, disputes, grievances or claims between the parties emanating from research and innovation activities. Settlement of disputes is important for the smooth sailing of the innovation ecosystem at NM-AIST. Amicable settlement of conflicts, grievances and disputes shall be encouraged except where the dispute has escalated requiring the intervention of remedies at National laws.

# 11.2 Policy Objective

To mitigate, resolve and settle, grievance, misunderstanding and disputes relating to the implementation of the policy and activities relating to research and innovations at NM-AIST.

# 11.3 Policy Statement

# NM-AIST shall;

- (a) Designate a committee for handling grievances and disputes relating to the implementation of the policy and all matters relating to research and innovation activities.
- (b) To manage, resolve and handle all grievances, conflicts and disputes relating to the implementation of the policy.
- (c) To manage, resolve and handle all grievances, conflicts and disputes relating to research and innovation activities at NM-AIST.

### CHAPTER TWELVE: OPERATIONALIZATION OF THE POLICY

The policy shall be administered by the office of the Deputy Vice Chancellor for Academic, Research and Innovation (DVC-ARI) and be implemented by all research and innovation stakeholders. The policy is not a stand-alone document its implementation shall align with other available institution policies, guidelines, regulations, and procedures.

This Policy shall apply to all research, innovation, incubation, acceleration of technology and commercialization from the date on which the reviewed Policy is approved by the Institutional Council. The implementation of the policy shall be provided for in the research and innovation guidelines. All NM-AST communities shall comply with all the provisions of the policy and its guidelines. The violation of the policy in any way shall be dealt with in line with the Institution's policies and procedures for the time being enforced. The Policy shall be reviewed within five years of its implementation or at any time when the need arises.

The DRI shall be responsible for overseeing the day-to-day monitoring and evaluation reporting on the implementation of the policy via its responsible offices. The DRI shall prepare and develop a framework for monitoring and evaluation to guide the implementation policy. The evaluation shall be done quarterly by the respective office. The respective offices shall submit the monitoring and evaluation reports to the director of research and innovation who shall forward them to the DVC-ARI. The content of the quarterly reports shall be analysed annually to assess the performance of the activities in the respective offices.