



KENYA MARINE AND FISHERIES RESEARCH INSTITUTE

RESEARCH POLICY



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MAY 2010



MISSION

To contribute to the management and sustainable exploitation of aquatic resources and thus alleviate poverty, enhance employment creation and food security through multidisciplinary and collaborative research in both marine and freshwater systems.

VISION

To be a centre of excellence in aquatic research and promotion of sustainable utilization of marine and freshwater resources.

IDENTITY STATEMENT

Kenya Marine and Fisheries Research Institute is a community of researchers totally committed to the generation, synthesis and dissemination of research findings to meet societal needs.

CORE VALUES

- Integrity, Transparency and Accountability
- Teamwork Spirit
- Equity and Fairness
- Information Sharing
- Sustenance of Environmental Integrity
- Sustainable Use of Natural Resources
- Food Security
- Responsible Creation of Wealth
- Promotion of Science and Technology

ABBREVIATIONS

CBD	Convention on Biodiversity
EAC	East African Community
EAFFRO	East African Freshwater Fisheries Research Organization
EAMFRO	East African Marine Fisheries Research Organization
EEZ	Exclusive Economic Zone
GDP	Gross Domestic Product
ICT	Information and Communication Technology
IP	Intellectual Property
KEPHIS	Kenya Plant Health Inspectorate Services
KIPI	Kenya Industrial Property Institute
KMFRI	Kenya Marine and Fisheries Research Institute
MDGs	Millennium Development Goals
NSCT	National Science Council and Technology
PC	Programme Coordinator
PI	Principal Investigator
R&IP	Research and Intellectual Property
UNCLOS	United Nations Convention on Law of the sea
WSSD	World Summit on Sustainable Development

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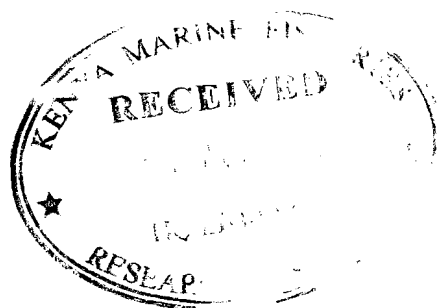
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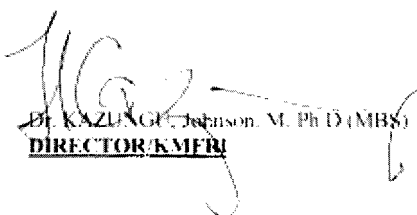
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FOREWORD

The Kenya Marine and Fisheries Research Institute (KMFRI) is a parastatal organization established in 1980 under Cap 250 of the Science and Technology Act, Laws of Kenya, to undertake research in marine and freshwater fisheries, aquaculture, environmental and ecological studies, and marine research including chemical and physical oceanography, in order to provide scientific data and information for the sustainable exploitation, management and conservation of Kenya's fisheries resources and aquatic environment, and contribute to national strategies towards food security, poverty alleviation, and the creation of employment and wealth. KMFRI is also empowered to address various regional and international trans-boundary issues besides national ones in which the Kenya Government has committed itself through regional and international agreements and conventions.

KMFRI collaborates with various national, regional and international institutions to build up various multi-skilled and multi-disciplinary research teams to undertake multi-disciplinary research to address issues that range from national perspective to global concerns. To achieve its mandate, KMFRI needs to promote an institutional culture of encouraging innovativeness by creating an environment that nurtures and sustains creative thinking through among other support strategies, guiding research procedures, facilitating dissemination of research findings, protecting ideas and innovations, recognizing and rewarding inventions and innovations besides overall excellence. Essentially, the policy is also meant to inspire and promote a sense of commitment and responsibility in the researcher.

To operationalize the functions of KMFRI in line with its mandate, specific guidelines need to be put in place to allow the realization of its Vision and Mission through its Research Strategic Plans to cover research priorities and facilitation in terms of budgets, manpower and logistics which are meant to support research productivity. Therefore, guided by its vision of becoming a centre of excellence in aquatic research, KMFRI is committed to creating a conducive environment that will promote quality research for meeting societal needs and national development. Finally, this policy will be reviewed periodically to keep abreast with identified relevant changing needs.


Dr. KAZUNGU Johnson, M. Ph D (MBS)
DIRECTOR/KMFRI

CHAIRMAN'S STATEMENT

The development of a Research Policy for Kenya Marine and Fisheries Institute (KMFRI) is a major milestone in the growth of the Institute in its endeavour to address its mandate as provided by the Science and Technology (Amendment) Act 1979 Cap 250. Due to the transboundary nature of issues that are within the mandate of KMFRI to address, it is necessary for the Institute to engage in research beyond national borders to include regional and international concerns, in which the Kenya Government has committed itself including various bilateral and multilateral agreements, conventions and laws. The diversity in issues to be addressed by the Institute call for multi-institutional and multi-disciplinary research approach involving partnership not only at the national level but also at regional and international levels. Such collaborations and partnerships are complex to manage and require institutional research policies for efficiency. This research policy has been developed to address challenges facing research activities in the Institute including: lack of policy on research and consultancy; lack of information on research and opportunities for funding; competition for research funds locally and internationally; the need for quality project proposals and reporting of scientific findings.

To address the above concerns, a Research Policy is crucial to ensure that researchers are effectively guided in good research culture, fund raising, dissemination of research findings, capacity building and technology development and transfer. Therefore, the strategic objectives of this policy, which have been carefully chosen, provide a useful roadmap towards the desired goal. The strategic objectives include: transforming KMFRI into a centre of excellence in aquatic research in the region and internationally; initiating, strengthening and maintaining collaborative research with national, regional and international institutions and strengthening Public-Private Sector Partnership in research knowledge management, innovation and wealth creation.

To implement the policy, an office will be established to link with the KMFRI's outreach and social responsibility office which will offer comprehensive advisory and technology transfer on patented and copyrighted works. The office will also assist in the commercialization of research based on intellectual property by facilitating access to development funds and management skills. Additionally, the office in charge of this policy will also assist in the assessment of research invention disclosures, establishment and implementation mechanisms

for protecting intellectual property including patents and copyrights besides management of institutional consultancies in line with the requirements of both the Research and Intellectual Property Rights Policies.

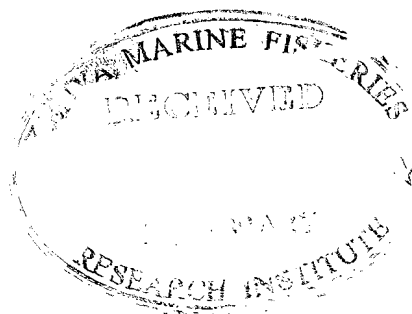
The KMFRI Research Policy will be reviewed at 3-year intervals from the time of its commissioning. This is necessary because of the dynamic nature in research knowledge which is catalyzed by technological advances and the globalization of the world's trade and economy. There is also the need to efficiently and rapidly share knowledge with various stakeholders to enhance national development.

I am confident that this policy will revolutionize research activities at KMFRI with increased impacts on the lives of Kenyans thus reducing poverty and creating wealth to rural communities. Moreover, this policy will enhance research and innovations at KMFRI in line with Vision 2030 which aims to improve the quality of lives of the Kenya people.



Prof. Peninah Aloo-Ojudo (FBS).

CHAIRMAN - KMFRI BOARD OF MANAGEMENT



EXECUTIVE SUMMARY

Since its creation in 1980, Kenya Marine and Fisheries Research Institute (KMFRI) has been operating without a Research Policy. Research activities have been carried out without a document that guides research for effective service delivery. Therefore, the policy is fundamentally structured to include guiding principles, policy framework, institutional framework, monitoring and evaluation and implementation strategy. The research policy framework has its origins in the Science and Technology (Amendment) Act (1979), Cap 250 of the Laws of Kenya, which gives KMFRI mandate to undertake research in Marine and Freshwater fisheries, aquatic environmental and ecological studies, and physical oceanography. The scope and rationale of this policy includes: guiding in the formulation of research agreements in the sponsored projects, management of information and databases, handling and managing sponsored projects and ethics in research among others.

The institutional framework gives the operational platform for the process of research project formulation, collaboration, implementation and management not only from a scientific and technical point of view but also budgeting, capacity building, technology training volunteering, consultancy and management of information and databases including ethics in research and conflicts management, all of which are guided by given policy statements. The effectiveness of any policy can be evaluated by having in place a monitoring and evaluation mechanism. Therefore, a set of specific and quantifiable indicators have been provided in the policy to enable the monitoring and evaluation of this policy.

The implementation strategy takes into cognizance the governance environment where flexibility is required to accommodate emerging research and development issues identified by the Government from time to time including Kenya's Vision 2030, as well as research agenda from bilateral and multilateral agreements signed by the Kenya Government. KMFRI will continue to undertake research along these lines and as guided by the KMFRI Board of Management through its committee, the KMFRI Scientific and Technical Committee.

This policy will, therefore, serve to enhance efficiency and promote increased productivity in research undertakings. For effective implementation of the policy, an office will be established to link up with the Outreach and Social Responsibility office to offer a comprehensive advisory service on research products that can be patented and copyrighted.

CHAPTER ONE

BACKGROUND

1.1 Introduction

The Kenya Marine and Fisheries Research Institute (KMFRI) was founded to take over the functions of former organizations – the East African Marine Fisheries Research Organization (EAMFRO) and the East African Freshwater Fisheries Research Organization (EAFFRO) whose functions ceased when the East African Community (EAC) collapsed in June, 1977. The Institute is a parastatal organization administered by a Board of Management constituted under the Science and Technology (Amendment) Act of 1979, Cap 250 of the Laws of Kenya.

The mandate of KMFRI, as defined by the Science and Technology Act, Cap 250, is to undertake research in marine and freshwater fisheries, aquaculture, environmental and ecological studies, and marine research including chemical and physical oceanography, in order to provide scientific data and information for sustainable exploitation, management and conservation of Kenya's fisheries resources and aquatic environment, and contribute to national strategies towards food security, poverty alleviation and creation of employment. The roles of KMFRI include:

- (a) To conduct multi-disciplinary and collaborative research on fish ecology, population dynamics, stock assessment and general aquatic ecology.
- (b) To collect and disseminate scientific information on fisheries and other aquatic resources and related natural products.
- (c) To study and identify suitable species for culture including development, adoption and transfer of rearing technology and procedure.
- (d) To study chemical and physical processes that affect productivity of aquatic ecosystems.
- (e) To monitor water quality and pollution in fresh and marine water environments.
- (f) To carry out socio-economic research on aspects relevant to fisheries, environment and other aquatic resources.
- (g) To establish a marine and freshwater collection for research and training purposes.
- (h) To offer training facilities for aquatic scientists.

- (i) To conduct research on fish quality control, post-harvest preservation and value addition technologies.

As provided for in its mandate, KMFRI is also empowered to address various regional and international trans-boundary issues besides national ones in which the Kenya Government has committed itself through regional and international agreements and conventions. KMFRI therefore collaborates with various national, regional and international institutions to build up various multi-skilled and multi-disciplinary research teams to undertake multi-disciplinary research to address issues that range from national perspective to global concerns.

The sources of information for the formation of this policy were based on a desktop study that involved gathering various information on the subject area from various websites of various national, regional and international universities and research institutions besides other publications and meetings to ensure harnessing best practices for harmonious collaboration not only at national levels but also regional and international levels. The following Kenya legal documents were also consulted: the Industrial Property Act Cap 509 administered by KIPI, which provides for the promotion of inventive and innovative activities and facilitates the acquisition of technology through grant and regulation of patents, utility models, rationalization models and industrial designs; the Copyright Act (2001) that safeguards against piracy; Trademarks Act Cap 506 that protects trademarks; the Seed and Plant Breeders Right Act Cap 326 administered by KEPHIS to take care of farmers and breeders rights and the Science and Technology (Amendment) Act (1979) Cap 250 administered by NCST to provide for regulation of scientific and technical mandates of scientific and technical institutions created by this Act.

1.2 The Role of Fisheries Research

The fishery sector is critically important and more so in the developing world where millions of people depend on fish for their livelihood. In Kenya, fish is a very important source of food and in some communities, more than half of animal protein is derived from fish. Over 2.3 million Kenyans depend on the sector directly or indirectly as a source of livelihood, employment and other economic sustenance.

The fisheries sector is playing a significant role in national economy and the overall contribution of fisheries to the GDP is reported to be about 0.5%. However, this estimate does not adequately

consider the value of all inputs in the fisheries, which could be as high as 5%. Additionally, the sector earns the country over 4 billion Kenya shillings from the export of fish and fishery products.

The fisheries sector has continued to face diverse challenges which include: overexploitation of fish resources, pollution, habitat destruction and other forms of environmental degradation and more recently, climate change. Fisheries and aquaculture research has continued to play a significant role in addressing these challenges and improving the management and utilization of fisheries and other aquatic resources in Kenya and in the reduction of adverse effects of human activities on the aquatic environment. This has been evident especially in the management of fisheries at Lake Victoria, Lake Naivasha and Ungwana Bay at the Coast where research-based recommendations by KMFRI scientists have led to the improved management of the fisheries in these water bodies. Research in water quality and ecosystem restoration has also led to a better environment in a number of water bodies in the country. Moreover, climate change as a significant emerging threat on aquatic resources will need to be addressed in terms of impact and vulnerability assessments; and identification of mitigation and adaptation measures.

Due to the dwindling capture of fisheries in Lake Victoria which singly accounts for over 90% of Kenya's annual total landings, attention has increasingly been turning to aquaculture, the farming of aquatic organisms besides exploration of lesser fished waters especially Lake Turkana and Kenya's EEZ in the Indian Ocean. Demand-driven and participatory research in fisheries and aquaculture is vital to conserve and protect the industry for present and future generations and to ensure sufficient production of aquatic resources through ensuring sustainable exploitation and scientific management. Therefore, research will be critical in the identification of suitable sites for aquaculture, seed and feed production so as to realise the immense potential in this sector and establishment of new fishing grounds and ensuring a healthy ecological aquatic environment. This will work to promote socio-economic benefits that include food security, wealth creation, poverty alleviation and employment creation in line with Vision 2030.

1.3 The Need for a Research Policy

KMFRI has been operating without a research policy since its inception. Consequently, this lack has caused some challenges in attaining efficient systems to support quality management of

research. Being a research organization that undertakes multi-disciplinary and multi-institutional collaboration not only at the national level but also at both regional and international levels in bilateral research programmes, KMFRI requires a research policy for the efficient management of research programmes and collaboration. The policy will further: promote opportunities for fund-raising through competitive project proposals for collaboration with partners; promote dissemination of research findings; regulate consultancy and reduce any conflicts that may arise in the process of undertaking research and its management.

Research activities the world over are dynamic and require institutions to be adaptable to various challenges. Research at KMFRI has been carried out without proper co-ordination and the Institute requires a policy to address issues relating to research activities especially collaborative research between KMFRI and other organizations both locally and internationally. This research policy will guide research scientists on the procedures to follow especially in collaborative research activities to avoid any future conflicts.

1.4 Strategic Objectives of the Policy

The strategic objectives of this policy are to:

- a) Transform Kenya Marine and Fisheries Research Institute into a centre of excellence in aquatic research in the region and internationally
- b) Initiate, strengthen and maintain collaborative research with national, regional and international institutions;
- c) Collaborate with the industry/private sector in research knowledge management, innovation and wealth creation.

CHAPTER TWO

GUIDING PRINCIPLES OF THE POLICY

2.1 Introduction

There is need to promote an institutional culture of encouraging innovativeness by creating an environment that nurtures and sustains creative thinking through, among other support strategies: guiding research procedures, facilitating dissemination of research findings, protecting ideas and innovations, recognition and rewarding for inventions and innovations, besides overall excellence.

This policy takes cognizance of the fact that there are various challenges facing research activities at the institute, hence the need to develop a research policy for KMFRI. The sections that follow discuss the guiding principles of this policy.

2.2 Creation of a Conducive Environment for Research

The Kenya Marine and Fisheries Research Institute is committed to establishing, maintaining and protecting an enabling research environment that promotes innovation and generation of research knowledge guided by its vision of becoming a centre of excellence in aquatic research. KMFRI is committed to creating a conducive environment that will promote quality research for national development. An enabling environment takes cognizance of appropriate governance structures to support the development and maintenance of research structures consistent with international standards.

2.3 Fair Reporting of Research Findings

Researchers shall be expected to maintain the highest degree of intellectual honesty in the reporting of research findings. They have the obligation of reporting any real or potential conflict of interest that may exist in carrying out their work.

2.4 Protection of Experiment and Laboratory Animals

The use of animals for research shall be guided by the established international conventions on the use of laboratory animals for experimentation and other forms of research. This would include, but not limited to, the humane treatment of research animals.

2.5 Protection of Intellectual Property Rights

To protect its researchers, KMFRI shall institute appropriate mechanisms to protect the intellectual property rights of its researchers in line with the Institute's Intellectual Property Rights Policy.

2.6 Transparency, Accountability, Confidentiality and Sensitivity

The Kenya Marine and Fisheries Research Institute shall uphold the principle of transparency, accountability, confidentiality and sensitivity during the implementation of this policy.

2.7 Partnership and Collaboration

For effective implementation of this policy, KMFRI shall create partnership and collaboration with local and international organizations.

CHAPTER THREE

THE RESEARCH POLICY FRAMEWORK

3.1 Introduction

Research is a systematic investigation designed to develop or contribute to generation of new knowledge in creative works and includes testing and evaluation. All research conducted under the auspices of KMFRI is as per the mandate bestowed to it. KMFRI further undertakes research jointly in collaboration with other institutions at national, international and regional levels within the mandated research areas in aquatic systems.

3.2 Scope of the Policy

This policy applies to all KMFRI researchers, technologists and technicians. They are all required to promptly execute all research assignments, contracts and other legal documents for vesting in KMFRI all rights to inventories, discoveries and patents as provided for in the Research and Intellectual Property Rights Policy. However, the policy will also apply to partners including volunteers in research who are collaborating with KMFRI by signing of agreements.

3.3 Rationale for the Research Policy

In the past, the Kenya Marine and Fisheries Research Institute has operated without a research policy and therefore there has never been a mechanism of dealing with research issues guided by a research policy. KMFRI's mandate gives the Institute the overall policy umbrella for its legal operation. However, to operationalize the functions of KMFRI in line with its mandate, specific research policy guidelines need to be put in place to allow the realization of its Vision and Mission through its Research Strategic Plans to cover research priorities and facilitation in terms of budgets, manpower, logistics and dissemination - which are meant to support research productivity. This includes how the integration of all the latter should be managed to bring about a harmonious work environment to achieve optimal research results in inventiveness and innovativeness. Human Resource Management policies, for both scientists and technical staff, are broadly guided by the Terms and Conditions of Service for KMFRI staffs, the Scheme of Service for Research Officers and the Staff Code of Conduct and the Public Officer Ethics Act (2003).

All these have, directly or indirectly, an impact on research productivity from a welfare and ethical point of view. Other policies, such as the KMFRI Financial Management and Procurement Guidelines, facilitate procedures of managing accounting, budgeting, expenditure and purchases which have also to be adhered to by KMFRI research staffs in their projects' management whereas other scientific policies such as the Industrial Property Act Cap 509 (which provides for promotion of inventive and innovative activities) facilitate the acquisition of technology through grant and regulation of patents, utility models, rationalization models and industrial designs. Other supportive laws are the Copyright Act (2001) which safeguards against piracy; the Seed and Plant Breeders Rights Act Cap 326 which takes care of farmers' rights and the Science and Technology (Amendment) Act (1979) Cap 250 which provides for regulation of scientific and technical mandates of scientific and technical institutions created by this Act.

The above documents broadly regulate some aspects of the research done by staff, conditions of their delivery and productivity and conduct of KMFRI staff, but they do not adequately deal with research issues relevant to guide KMFRI research, innovation, discoveries and patents as products of research in terms of intellectual property rights. This policy will not only strengthen research activities at KMFRI but it will also provide basis for accountability and collective responsibility on matters touching on research.

3.4 Goal

The goal of this research policy is to guide the research process, conduct, collaboration, partnership, implementation, dissemination, data management and extension.

3.5 Objectives

The overall objective of this policy is to create a conducive research environment at the Kenya Marine and Fisheries Research Institute to promote the sustainable utilization of aquatic resources for poverty alleviation and wealth creation.

The specific objectives of this research policy are to guide in:

- a) Formulation of research agreements in sponsored projects;
- b) Roles and financial responsibilities of Principal Investigators and Programme Coordinators in both sponsored research and KMFRI programme research;
- c) Consultancy;

- d) Volunteering in Research;
- e) Researchers in Budgeting;
- f) Cost sharing in research;
- g) Charging for administrative and technical expenses;
- h) Management and control of research equipment and facilities for handling KMFRI funded and sponsor funded research;
- i) Handling and managing sponsored projects and gifts-funded projects;
- j) Use of gifts by sponsors for research;
- k) Management of Information and Databases;
- l) Ethics in Research;
- m) Conflicts of interest and commitment to the institute.



CHAPTER FOUR

INSTITUTIONAL FRAMEWORK

4.1 Formulation of Research Agreements in Sponsored Projects

Researchers will be guided by the employer in the formulation of research agreements in sponsored projects including Research Participation Agreements, Product Test Agreements, Equipment Loan Agreements, Material Transfer Agreements, Industrial Collaboration Agreements, Consultancy Agreements, Research and Training Curriculum Agreements, Research Contracts and Deeds.

Policy Statement

KMFRI shall work out its own standard agreement forms for industrial, institutional and partnership collaboration agreements which will also address equity issues.

4.2 Roles and Financial Responsibilities of Principal Investigators and Programme Coordinators in both Sponsored Research and KMFRI Programme Research

4.2.1 Principal Investigator (PI)

The Principal Investigator has overall responsibility for technical and fiscal management of a sponsored project. This responsibility includes management of the project, adherence to reporting requirements, adherence to budget and assuring that any significant changes related to the project agreement are notified to the sponsor and/or Director KMFRI.

Policy Statement

KMFRI shall delegate the handling of the finances and procurement to administrative staff though the accountability shall ultimately rest with the Principal Investigator.

Specifically, the roles of the Principal Investigator are as follows:

- (a) In a research team, the team leader who is the Principal Investigator is responsible for the overall conduct of the research project under his supervision. This responsibility includes assuring the highest ethical standards in the conduct of the research and dissemination of research results. Besides this, the Principal Investigator will strive to detect irregular

practices in research procedures and introducing remedial measures in case of innocent mistakes and investigating and eliminating wilful misconduct;

- (b) The Principal Investigator is responsible for the research procedures to gather, record and retain research data and information according to the scientific and professional standards of the research discipline;
- (c) The Principal Investigator is responsible for the dissemination and reporting of research results including the ethical consideration of authorship to ensure that the contributions of all investigators are appropriately recognized and that all co-authors accept responsibility for their contributions to the research work being reported;
- (d) Principal Investigators are responsible to their Programme Coordinators in their respective disciplines who in turn are responsible to Deputy Directors in charge of research.

4.2.2 Programme Coordinator (PC)

The Programme Coordinator as the leader of KMFRI Research Programme has the following roles:

- (a) Implementing research programmes and coordinating projects and activities of the Research Programme;
- (b) Facilitating multi-disciplinary research amongst other research programmes;
- (c) Undertaking planning and budgeting for overall activities of the programme;
- (d) Promoting partnerships in research with various stakeholders.
- (e) Organizing research programme database and promote dissemination of information and awareness.

Policy Statement

KMFRI programme coordinators shall ensure that they efficiently coordinate research activities including multidisciplinary research.

4.3 Consultancy

Individual Consultancy can only be done after the full-time commitment to KMFRI has been fulfilled and the researcher should not use KMFRI resources and time. Where individual consultancy has been declared, it will be considered Institutional and the fee negotiated as

income will appropriately be shared according to the KMFRI revenue share policy that involves the researcher and others as provided for in the KMFRI Intellectual Property Rights Policy. The nature of the consulting work should not distract the responsibilities of the researcher or bring disputes to KMFRI and jeopardize the integrity of KMFRI. A researcher may take leave without pay to undertake individual consultancy.

4.3.1 Regulation of Consulting Time and Charges

KMFRI regulates allowable consulting time to ensure minimal conflict with KMFRI's research work to be done by its employees. However, KMFRI does not regulate the charges in individual research consultancies but it is involved in the determination of charges for institutional research consultancy.

The Institute does not regulate the royalties on inventions patented from individual research consultancies except where it is established that KMFRI facilities and resources were used in the research work. For institutional research consultancy, KMFRI is involved in the management of royalties arising from the patented inventions of such works.

Policy Statement

KMFRI shall work out its own standard consultancy agreement which will also address equity issues, where the individual consultancy has been declared and therefore considered institutional consultancy.

4.4 Volunteering in Research

Recognizing that volunteers need to make better use of their talents, skills and expertise to productively and effectively contribute not only to society but also sharpen their talents, skills and expertise to build their career at no cost to the organization, KMFRI will endeavour to make good use of the volunteer's time and task effort by ensuring that the volunteer tasks are clearly defined and at the end of their volunteering period thank them and recognize their efforts.

Policy Statement

All volunteers shall sign an agreement with KMFRI that they agree to abide with the research and intellectual property rights policies regarding management of research as provided for by the KMFRI research and intellectual property rights policies.

4.5 Researchers in Budgeting

Budgeting is done to ensure that there are sufficient funds and resources to complete the research work. The resources budgeted for include finances for personnel, infrastructure, equipment and logistics. These cover direct costs for the salary, travel, accommodation and subsistence for staff working in the project, consumables and capital items among others. Other costs include indirect costs such as administrative costs of the project by KMFRI for use of KMFRI facilities which is normally a minimum of 20% of the overall direct costs of the project out of which 10% goes to KMFRI headquarters and 10% to the Programme Coordinator. Any officer drawing a salary from a project will forfeit the KMFRI salary to avoid double payment in salary for the duration of the project.

Policy Statements

- (a) Allowances payable to all participating officers in research are negotiable with the sponsor but will be benchmarked with the corresponding KMFRI allowances.
- (b) KMFRI shall ensure that researchers are not paid rates which are below the equivalent Institute amounts.

4.5.1 Cost Sharing in Research

Costs that may be considered for cost sharing in agreements are administrative and technical expenses including staff salaries, travel expenses, laboratory supplies, accommodation, electricity and water supplies among others but not the cost of using equipment.

4.5.2 Charging for Administrative and Technical Expenses

- (a) Administrative expenses (salaries of clerical and administrative personnel, supplies and other expenses) should normally be treated as facilities and administrative or indirect costs. KMFRI may charge directly those administrative costs that are considered extra costs due to undertaking the project activities and therefore it is necessary that the negotiated project includes a budget for administrative services.
- (b) Technical expenses (salaries of Principal Investigators and technical staff, laboratory and other technical expenses) shall be treated as direct costs and can be charged as agreed in a sponsored project agreement. The charged costs from the project will be partly to the Institute as running costs as per project agreement.

4.6 Management and Control of Research Equipment and Facilities for Handling KMFRI-Funded and Sponsor-Funded Research

4.6.1 Research Equipment and Facilities

The quality and timeliness of generating, processing and transferring research data and information is highly dependent on the quality of research equipment and facilities which include laboratory, aquariums, aquaculture facilities, research vessels, library and Information and Communication Technology (ICT) facilities.

Policy Statements

- (a) KMFRI shall ensure that it keeps an updated catalogue and frequently checks facilities, replaces outdated technologies and keeps track with current standard accepted research equipment and facilities to ensure successful achievement of research.
- (b) KMFRI shall develop a code of conduct of use of research equipment and facilities to enhance the life of use of such equipment and facilities and minimize breakdowns.
- (c) KMFRI shall modernize its research equipment purchased through KMFRI budget, sponsored research projects and gifts. Equipment purchased through sponsored research projects shall automatically revert to KMFRI property after the end of the research project contract unless otherwise stated in the research agreement.
- (d) KMFRI shall accept equipment on loan according to specific agreement with partners.

4.6.2 Research Demonstration Sites and Facilities

Aquaculture production requires demonstration of techniques near local farmers to ensure high quality of products.

Policy Statement

KMFRI shall use on-farm and on-site demonstration of aquaculture production techniques to farmers as part of its extension services in partnership with farmers and other partners who may provide facilities such as ponds, dams or land for construction of ponds through mutual agreements which will consider, among other terms, cost sharing and ownership of the cultured product and its disposal.

4.7 Handling and Managing Sponsored Projects and KMFRI-Funded Projects

Projects should be clearly defined and categorized as either sponsored projects or KMFRI-funded projects for efficient handling and management including accountability.

A project may be categorized as a sponsored research if it is funded externally or a KMFRI-funded research if it is funded from KMFRI funds arising from internally generated income (e.g. technology licensing income, operating budget) and Government grants which may be through a competitive application and award process if necessary. A further source may be, for example, funds generated within a research programme such as aquaculture programmes which may generate appreciable income to fund its own research.

Policy Statement

KMFRI shall ensure sources of funds for research are identified, known and distinctly accounted for to avoid duplication in use of funds to pay costs of same activities.

4.8 Use of Gifts by Sponsors for Research

Usually there are no contractual obligations required and no direct deliverables concerning gifts. However, in some circumstances, it may be necessary that there is an agreement that restricts the use of funds for a particular purpose but there is no formal fiscal accountability to the partner beyond periodic progress reports and summary reports of the expenditures.

Policy Statement

KMFRI staff shall ensure that they declare gifts by sponsors for research and used for agreed purposes for accountability.

4.9 Management of Information and Databases

Data shall include but not be limited to:

- (a) Laboratory notes, results and analysis;
- (b) Research notes, research data reports, and research notebooks.

These databases are considered very essential with regard to intellectual property.

Policy Statements

- (a) A database for KMFRI research projects shall be maintained. For each research project, the database shall specify the name of Principal Investigator, the project title, the amount and source of funding, the project period, equipment, and objective, abstract and expected outputs.
- (b) Access to database information shall be determined as per project agreements between the collaborating Institution(s) and KMFRI in case of sponsored research.
- (c) Primary data shall be filled or recorded in a record book which shall be signed by the recorder, investigator and Principal Investigator.
- (d) Data shall be recorded in a format approved by the principal investigator. This data shall ultimately be archived by the KMFRI Database Units under appropriate confidential agreement on data handling to avoid conflicts in the process of patenting invention and copyright regulations.

4.10 Ethics in Research

To guide ethics or morals in research, the code of professional conduct for KMFRI researchers will be developed to entail honesty, integrity, transparency, respect for intellectual property, confidentiality, responsible publication, respect of the law, respect of animal and plant welfare, respect for the environment, social responsibility and bio-safety

Policy Statement

KMFRI shall develop a code of conduct for research management and collaboration.

The sections that follow present specific elements shall be given due diligence.

4.10.1 Fraud

Research fraud involves the falsification or fabrication of data, plagiarism or grossly negligent data collection or analysis and leads to research misconduct. It is important that mechanisms are put in place so that such activities are detected and dealt with to avoid embarrassment or bring disrepute to the Institute and collaborators.

Research findings have to be questioned and re-examined to minimize the likelihood of research fraud. When research fraud is detected, it should be reported and culprit be dealt with as per

KMFRI staff policies or as per research agreement between the collaborating institutions. Above all, researchers are expected to:

- (i) Have the responsibility to be honest in research and avoid fraud which amounts to research misconduct;
- (ii) Accept responsibility for the quality of their work and their collaborators;
- (iii) Accept to be an author where one has had a genuine role in the research and that all named must accept responsibility for the quality of the research work reported;
- (iv) Provide monitoring and evaluation mechanism to ensure quality research data and information is achieved;
- (v) Be responsible for a research misconduct done by his/her subordinates working under his/her supervision in the project if he/she is found negligent to the extent that such professional negligence caused by the fraud.

Policy Statements

- a) KMFRI shall ensure that its staff avoid fraudulent activities in conducting research.
- b) KMFRI shall put mechanisms in place to ensure accurate reporting of any fraudulent activities.

4.10.2 Bio-Safety

This aspect of the policy shall apply to projects which use:

- (a) Recombinant DNA which may be hazardous to humans and other animals;
- (b) Potentially oncogenic biological materials;
- (c) Infectious biological materials in the laboratory or in the field;
- (d) Biological toxins and venoms;
- (e) Transgenic materials which may be harmful to humans, other animals and plants.

Laboratory personnel will be informed about the potential hazards of chemicals and biological agents they may come in contact with at the work place.

Policy Statements

- (a) KMFRI shall put in place precautionary measures to safeguard its research staff from potential hazards in biotechnology research and facilities.

- (b) KMFRI shall develop and implement the Hazard and Hygiene Contingency Plan to ensure safety in the research facilities.

4.11 Research Misconduct

The conduct and integrity of a researcher has a significant effect on the acceptance of the research outputs of the researcher by peers, stakeholders and public at large. Additionally, it affects the image of the organization. Thus organizations must have safeguards for promoting good conduct and integrity if they have to successfully address their research mandates and compete effectively with other related organisations.

Policy Statements

- (a) KMFRI shall put in place a rewarding process that will promote exemplary excellent conduct and integrity in researchers.
- (b) KMFRI shall put in place a disciplinary process that will deter activities that could lead to research misconduct.

4.12 Disciplinary Procedures

This research policy adequately covers what amounts to research misconduct which would consequently lead to undertaking disciplinary measures against the concerned researcher(s). However, the Institute will ensure that such actions are justified and fair being commensurate with the nature of misconduct.

Policy Statements

- (a) KMFRI shall put in place a Disciplinary Committee to deal with research misconducts with transparency, justice and fairness.
- (b) KMFRI shall put in place an Appeals Committee to deal with appeals from concerned staff arising from decisions made by the Disciplinary Committee.
- (c) KMFRI shall ensure that the instituted disciplinary measures are commensurate with the nature of misconduct.

4.13 Confidentiality

Confidentiality is an important aspect of research. Research activities and related confidential documents which require confidentiality will be handled with the integrity they deserve.

Policy Statements

- (a) KMFRI Staff shall observe confidentiality as per signed Confidential Agreement.
- (b) KMFRI shall ensure confidentiality in handling research misconduct and related issues.

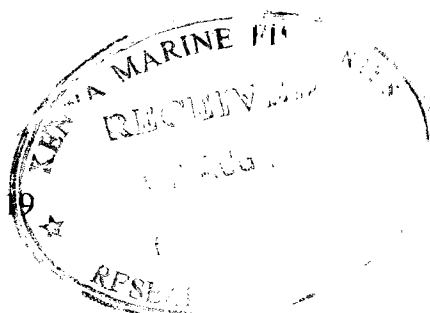
4.14 Conflicts of Interest and Commitment

Quality research can best be conducted in an atmosphere that is free of conflicts of interest. Conflicts of commitment and interest compromise the integrity and objectivity of the researcher. Conflict of interest should therefore be disclosed.

KMFRI staff owes their professional allegiance to the Institute and therefore have to commit their time and intellectual energy in research activities of the Institute.

Policy Statements

- (a) KMFRI shall develop tools to ensure that staff balance their KMFRI responsibilities with external activities such as individual consultancies including any activity that results in absence from duty.
- (b) KMFRI shall ensure that staff avoid making personal financial gains or otherwise from KMFRI research information and resources without appropriately sharing the proceeds as per defined policy or royalties from research activities.
- (c) KMFRI shall foster a free atmosphere for promoting open and timely exchange of research results and advise researchers against personal commercial interest and discourage outside activities that may influence free exchange of research information between them.
- (d) KMFRI staff shall not use KMFRI facilities for individual outside consultancies or for any other purpose that are unrelated to KMFRI research.
- (e) KMFRI staff shall disclose to the Institute whether they have consulting or employment relationships with other external institutions such as involving gifts for projects, sponsored projects and patents, among others.



CHAPTER FIVE

MONITORING AND EVALUATION

The KMFRI Research Policy will be reviewed every three (3) years from the time of its commissioning for effectiveness. This is necessary because of the dynamic nature of changes in research and knowledge which are catalyzed by technological advances and globalization of the world's trade and economy and consequently the need to efficiently and rapidly share knowledge with various stakeholders. Therefore, the successful and effective implementation of the policy will depend on monitoring and evaluation of the entire process.

The following are the quantifiable principal indicators for monitoring and evaluation of the policy by determining their trend dynamics during the policy implementation:

- (i) Research projects development and implementation;
- (ii) Research collaboration and networks;
- (iii) Research publications, mass communication and awareness;
- (iv) Research innovations and inventions;
- (v) Economic impact of research;
- (vi) Impact of research in national, regional and international concerns;
- (vii) Capacity to undertake quality research;
- (viii) Capacity to build research excellence;
- (ix) Sustainability of research funding and support.

Policy Statements

- (a) KMFRI shall ensure to put in place a monitoring and evaluation process of the policy using suitable indicators by independent peer reviewers.
- (b) KMFRI shall constitute a Monitoring and Evaluation Committee to oversee the effective implementation of this policy.

CHAPTER SIX

IMPLEMENTATION STRATEGY

KMFRI has been operating without a Research Policy since its inception. The Institute undertakes research anchored on its defined mandate and contained in its Strategic Plan which is reviewed from time to time to accommodate emerging research and development issues. Besides, the Institute undertakes bilateral, regional and international research as per various bilateral and multilateral agreements that the Kenya Government has signed. KMFRI will continue to undertake research along these lines and as guided by the KMFRI Board of Management through its committee, the KMFRI Scientific and Technical Committee, following the procedure summarized in Figure 1. The KMFRI Research Policy will serve to enhance efficiency and promote increased productivity as its primary goal.

In the implementation process, an office will be established to ensure the effective implementation of the policy. The office will assist in the assessment of research invention disclosures, establishment and implementation mechanisms for protecting intellectual property including patents and copyrightable works besides management of institutional consultancies in line with the requirements of both the Research and Intellectual Property Rights Policies.

POLICY IMPLEMENTATION MATRIX

Policy Area	Policy Statement	Activity	Players/Actors	Monitorable Indicators
4.1 Formulation of research agreements in sponsored projects	KMFRI shall work out its own standard agreement forms for industrial, institutional and partnership collaboration agreements which will also address equity issues.	Formulate KMFRI Research Partnership Collaboration Agreement.	Deputy Directors (Marine and Coastal Research and Inland Waters Research)	KMFRI Research Partnership Collaboration Agreement in place and in use
4.2 Roles and financial responsibilities of Principal Investigators and Programme Coordinators in both sponsored research and KMFRI programme research	<ul style="list-style-type: none"> • KMFRI shall delegate the handling of the finances and procurement to administrative staff though the accountability shall ultimately rest with the Principal Investigator. • KMFRI programme coordinators shall ensure that they efficiently coordinate research activities including multi-disciplinary research. 	Delegate finance and procurement activities to Administrative staff and be implemented with immediate effect	<ul style="list-style-type: none"> • Principal Investigator • Deputy Director (Finance and Administration) • Deputy Directors (Marine and Coastal Research and Inland Waters Research) 	<ul style="list-style-type: none"> • Financial Reports produced timely • Procurement done timely
4.3 Consultancy	KMFRI shall work out its own standard consultancy agreement	Formulate KMFRI Research Consultancy	Deputy Directors (Marine and Coastal Research and	KMFRI Research Consultancy

	which will also address equity issues, where the individual consultancy has been declared and therefore considered institutional consultancy.	Agreement.	Inland Waters Research)	Agreement in place and in use
4.4 Volunteering in Research	All volunteers shall sign an agreement with KMFRI that they agree to abide with the research and intellectual property rights policy regarding management of research as provided for by the KMFRI research and intellectual property rights policy.	Formulate KMFRI Research Volunteer Agreement.	Deputy Directors (Marine and Coastal Research and Inland Waters Research)	KMFRI Research Volunteer Agreement in place and in use
4.5 Researchers in Budgeting	<ul style="list-style-type: none"> • Allowances payable to all participating officers in the research are negotiable with sponsor but shall be benchmarked with the corresponding KMFRI allowances. 	Make a KMFRI Financial Circular for management of this activity.	Deputy Director (Finance & Administration)	<ul style="list-style-type: none"> • Financial Management Circular in place and implemented • Researchers paid approved rates

	<ul style="list-style-type: none"> • KMFRI shall ensure that researchers are not paid rates which are below the equivalent Institute amounts. 			
4.6 Management and Control of Research Equipment and Facilities for Handling KMFRI-Funded and Sponsor-Funded Research.	<ul style="list-style-type: none"> • KMFRI shall ensure that it keeps an updated catalogue and frequently checks facilities, replaces outdated technologies and keeps track with current standard accepted research equipment and facilities to ensure successful achievement of research. • KMFRI shall develop a code of conduct of use of research equipment and facilities to enhance the life of use of such equipment and facilities and minimize breakdowns. • KMFRI shall modernize its research equipment 	<p>Make an update of the catalogue of KMFRI equipment and facilities, their status and conditions for use</p>	<ul style="list-style-type: none"> • Principal Laboratory Technologist , • Master fisherman • Deputy Directors (Marine and Coastal Research and Inland Waters Research) 	<p>Updated catalogue available and used for managing the research equipment and facilities</p>

	<p>purchased through KMFRI budget. sponsored research projects and gifts. Equipment purchased through sponsored research projects shall automatically revert to KMFRI property after the end of the research project contract unless otherwise stated in the research agreement.</p> <ul style="list-style-type: none">• KMFRI shall accept equipment on loan according to specific agreement with partners.• KMFRI shall use on-farm and on-site demonstration of aquaculture production techniques to farmers as part of its extension services in partnership with farmers and other partners who may			
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	provide facilities such as ponds, dams or land for construction of ponds through mutual agreements which will consider, among other terms, cost sharing and ownership of the cultured product and its disposal.			
4.7 Handling and managing sponsored projects and KMFRI-funded projects	KMFRI shall ensure sources of funds for research are identified and known and distinctly accounted for to avoid duplication in use of funds for paying costs of same activities.	<ul style="list-style-type: none"> • Document partner sponsored research projects • Document all KMFRI funded projects on a regular basis. 	<ul style="list-style-type: none"> • Deputy Director (Finance and Administration) • Deputy Directors (Marine and Coastal Research and Inland Waters Research) 	Documentation of partner-sponsored and KMFRI-funded projects made and maintained
4.8 Use of gifts by sponsors for research	KMFRI staff shall ensure that they declare gifts by sponsors for research and used for agreed purposes for accountability.	Document all the gifts given by sponsors for research regularly.	<ul style="list-style-type: none"> • Chief Supplies Officer • Deputy Director (Finance & Administration) • Deputy Directors (Marine and Coastal Research and Inland 	Catalogue of gifts in place

4.9 Management of Information and Databases	<ul style="list-style-type: none"> • A database for KMFRI research projects shall be maintained. For each research project, the database shall specify the name of Principal Investigator, the project title, the amount and source of funding, the project period, major equipment, and objective, abstract and expected outputs. • Access to database information shall be determined by as per project agreements between the collaborating Institution(s) and KMFRI in case of sponsored research. • Primary data shall be filled or recorded in a record book which shall be signed by the 	Update database and undertake this activity regularly.	<p style="text-align: center;">Waters Research)</p> <ul style="list-style-type: none"> • Deputy Directors (Marine and Coastal Research and Inland Waters Research) • Principal Investigator Programme Coordinator 	An up-to-date database in place and records in suitable formats to facilitate patenting
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	<p>recorder, investigator and Principal Investigator.</p> <ul style="list-style-type: none"> Data shall be recorded in a format approved by the principal investigator. This data shall ultimately be archived by the KMFRI Database Units under appropriate confidential agreement on data handling to avoid conflicts in the process of patenting invention and copyright regulations. 			
4.10 Ethics in Research	<ul style="list-style-type: none"> KMFRI shall develop a code of conduct for research management and collaboration c) KMFRI shall ensure that staff avoid fraudulent activities in conducting research. 	Prepare a Code of Conduct for Scientific and Technical Staff.	Deputy Directors (Marine and Coastal Research and Inland Waters Research)	Code of Conduct for Scientific and Technical Staff in place and being implemented.

	<p>d) KMFRI shall put mechanisms in place to ensure accurate reporting of any fraudulent activities.</p> <ul style="list-style-type: none"> • KMFRI shall put in place precautionary measures to safeguard its research staff from potential hazards in biotechnology research and facilities • KMFRI shall develop and implement the Hazard and Hygiene Contingency Plan to ensure safety in the research facilities. 			
4.11 Research Misconduct	<ul style="list-style-type: none"> • KMFRI shall put in place a rewarding process that will promote exemplary excellent conduct and integrity in researchers • KMFRI shall put in place a disciplinary process that will 	Recreate the KMFRI Management Scientific and Technical Committee with further terms of reference to deal with rewards and research	<ul style="list-style-type: none"> • Deputy Directors (Marine and Coastal Research and Inland Waters Research) • Programme Coordinators • Principal 	<ul style="list-style-type: none"> • Invigorated KMFRI Management Scientific and Technical Committee in place and

	deter activities that will lead to research misconduct	misconducts.	Laboratory Technology <ul style="list-style-type: none"> • Master fisherman 	working within the revised terms of reference. <ul style="list-style-type: none"> • Expect reduction in research misconducts to nil and increase in research awards to scientists.
4.12 Disciplinary Procedures	<ul style="list-style-type: none"> • KMFRI shall put in place a Disciplinary Committee to deal with research misconducts with transparency, justice and fairness • KMFRI shall put in place an Appeals Committee to deal with appeals from concerned staff arising from decisions made by the Disciplinary Committee • KMFRI shall ensure that the 	Add the terms of reference for KMFRI Board of Management Scientific Technical Committee to deal with disciplinary matters of research in nature.	KMFRI Board of Management Scientific and Technical Committee	Expect reduction in Disciplinary cases in research.

	<p>instituted disciplinary measures are commensurate with the nature of misconduct.</p>			
4.13 Confidentiality	<ul style="list-style-type: none"> • KMFRI staff shall observe confidentiality as per signed confidential agreement • KMFRI shall ensure confidentiality in handling research misconduct and related issues. 	<p>Formulate a KMFRI Research Confidential Agreement in Research.</p>	<p>Deputy Directors (Marine and Coastal Research and Inland Waters Research)</p>	<ul style="list-style-type: none"> • KMFRI Research Confidential Agreement in research in place and being implemented
4.14 Conflicts of Interest and Commitment	<ul style="list-style-type: none"> • KMFRI shall develop tools to ensure that staff balance their KMFRI responsibilities with external activities such as individual consultancies including any activity that results in absence from duty. • KMFRI staff shall ensure that staff avoid making personal financial gains or 	<p>Formulate a KMFRI Research Participation and Contract Agreement.</p>	<p>Deputy Directors (Marine and Coastal Research and Inland Waters Research)</p>	<ul style="list-style-type: none"> • KMFRI Research Participation and contract Agreement being implemented to regulate individual and institutional

	<p>otherwise from KMFRI research information and resources without appropriately sharing the proceeds as per defined policy or royalties from research activities.</p> <ul style="list-style-type: none"> • KMFRI shall foster a free atmosphere for promoting open and timely exchange of research results and advise researchers against personal commercial interest and discourage outside activities that may influence free exchange of research information between them. • KMFRI staff shall not use KMFRI facilities for individual use outside consultancies or for any 			<p>consultancies</p> <ul style="list-style-type: none"> • Improved management of consultancy achieved. • A success rate of abiding to the code of conduct for scientific and technical staff is achieved.
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	<p>other purposes that are unrelated to KMFRI research.</p> <ul style="list-style-type: none"> • KMFRI staff shall disclose to the Institute whether they have consulting or employment relationships with other external institutions such as involving gifts for projects, sponsored projects and patents, among others. 			
<p>5.0 Monitoring and Evaluation</p>	<ul style="list-style-type: none"> • KMFRI shall put in place a monitoring and evaluation of the policy using suitable indicators. • KMFRI shall constitute a Monitoring and Evaluation Committee to oversee the effective implementation of this policy. 	<p>Appoint a Monitoring and Evaluation Committee</p>	<p>Director KMFRI</p>	<p>Policy reviewed regularly and feedback given to the KMFRI Board of Management</p>

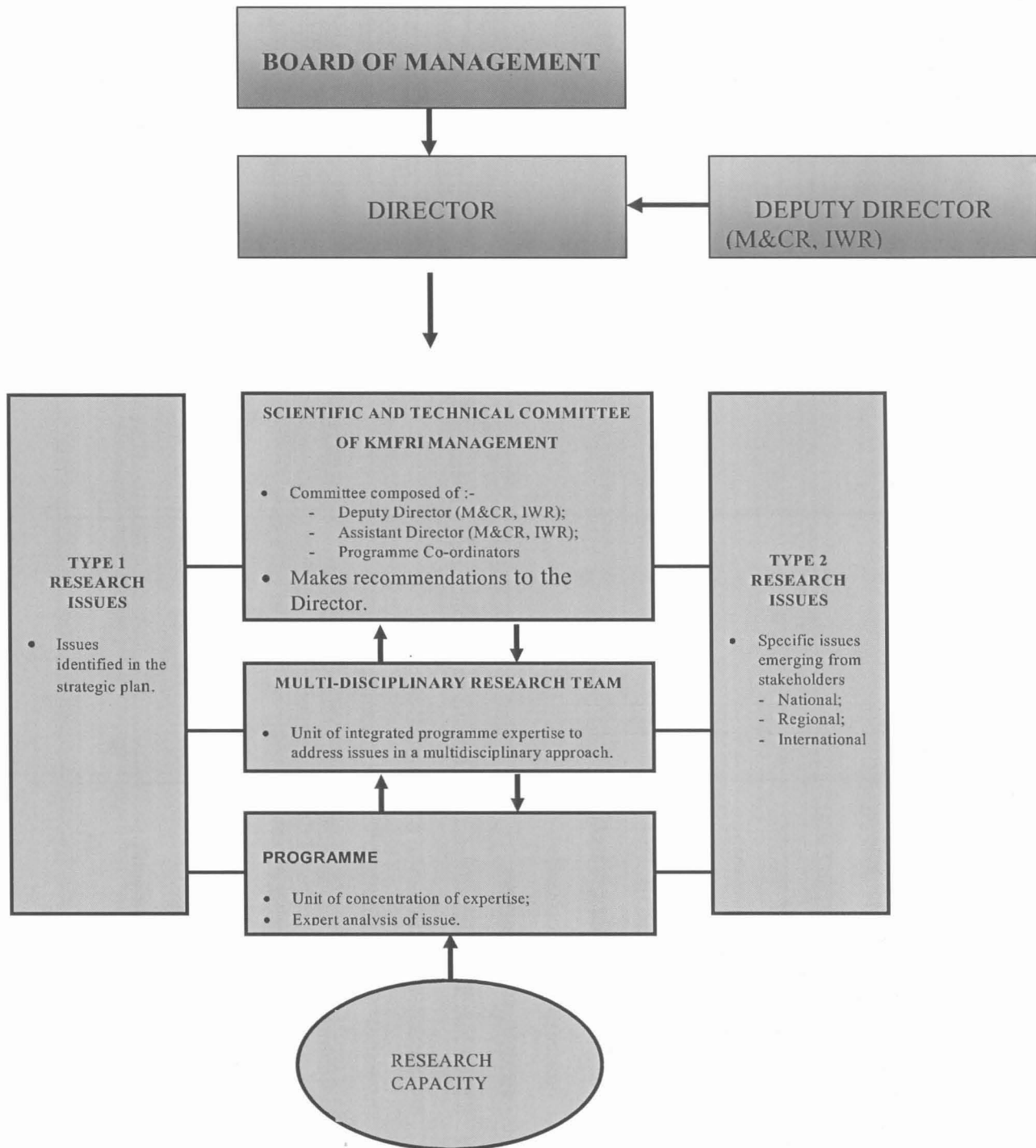


FIGURE 1: Mode of Implementation of Research Programme Approach in KMFRI

ANNEXES

ANNEX 1: DEFINITION OF TERMS

1.1 Administrative Expenses

Administrative expenses are indirect costs for management offering service to the project and use of the institution's facilities and a fee is therefore levied on the sponsored project to pay for these costs. Other costs that cover for research staffs in the project for salary, travel, consumables, capital items, equipment and logistics are described as direct costs.

1.2 Confidential Agreement

It is a legal document that is commonly used when a researcher wishes to discuss the outcome (whether known to him/her or not) with someone who might have a vested interest in the research results, business information and trade secrets among others, for example, to a potential commercialization partner or author. It is a must that information relating to patentable invention or discovery when discussed with an external organization, a confidentiality agreement is signed. Confidential information is restricted for use within the terms and conditions stated in the agreement. Information on human subjects which may be unethical to disclose is also regarded as confidential. Socio-economic research also involves interviewing people using various methods including questionnaires. The individual identity of people giving the information will be handled confidentially for various ethical reasons.

1.3 Conflict of Commitment

Involves a situation in which an employee engages in an outside activity that interferes or appears to interfere with the fulfilment of the employee's obligation to KMFRI. This is irrespective of whether or not that outside activity is valuable to KMFRI or contributes to the employee's professional development and competence.

1.4 Conflict of Interest

This is a situation in which a researcher has significant financial or other personal considerations that may compromise or have the appearance of compromising the professional judgment or integrity in conducting or reporting research.

1.5 Consultancy

Consultancy is generally defined as a paid professional activity related to the researcher's expertise where a fee for service is negotiated with external institution by the officer in case of individual consultancy or by KMFRI in case of institutional consultancy. In consultancy, the researcher agrees to use his/her professional capabilities to perform the third party's given activity for financial gain.

1.6 Consultancy Agreement

It is a legal document that defines the terms and conditions under which the researcher provides services to a client.

1.7 Copyright

Copyright protects original literary or artistic works in a variety of forms, including written materials and computer software. Copyright does not protect ideas but rather the expression of such ideas. It prevents anyone from copying, publishing, translating or broadcasting a work without the copyright owner's permission.

1.8 Equipment Loan Agreement

This is an agreement whereby a sponsor may loan certain equipment to a research organization, such as hardware and software, for research use in a joint programme and share the results including data. The agreement does not involve money but enables the research organization and the collaborating institution opportunity to use each other's facilities.

1.9 Equity

Equity is a form of stock or any other instrument conveying ownership interest received by a corporation in licensing transactions arising from intellectual property.

1.10 Ethics

Ethics are often explained as moral standards or norms for behaviour by which human beings judge other people who are under common governance or management in a defined institution. Institutions have their own specific guiding ethics and the ethical or moral standards are also referred to as code of conduct or rules of conduct by which their employees abide in pursuit of their institutional mandates and values.

1.11 Gift

A gift is an item of value given to an institution (including its staff) by a partner who expects nothing in direct return but would like to see the value and recognition through intended use as per the partner's wish or agreement with the institution.

1.12 Industrial Collaboration Agreement

Research institutions and companies are increasingly getting into joint research partnerships. Formal contracts called Industrial Collaboration Agreements are required for harmonious working relationships.

1.13 Innovation

The term innovation means a new way of doing something and may refer to incremental, radical and revolutionary changes in thinking, products, processes or organizations.

1.14 Intellectual Property

Intellectual Property (IP) is defined as any form of knowledge or expression created with one's intellect and includes such things as inventions and even simple knowledge on how to do something. In research work, it is necessary to put in place forms of statutory protection for intellectual property to safeguard inventions. The two most relevant forms of statutory of protections are copyrights and patents. Generally, whereas copyright protects the expression of an idea, patents protect inventions.

1.15 Invention

An invention is ordinarily defined as being a new or useful machine article of manufacture, composition of matter, process or any new use of the same.

1.16 Investigator

Any member of the research staff who participates in a research or other role intended to create, apply or disseminate new knowledge is termed an investigator.

1.17 Material Transfer Agreement

These are contracts by which tangible research property (e.g. biological organisms) is provided by external sources to a research organization for research or vice versa.

1.18 Patent

Patent protects an invention such as a creation or discovery which is new or not obvious and useful items including devices, chemical compound, transgenic animals and plant varieties. What makes invention new is that it has not been publicly disclosed prior to filing of a patent application.

1.19 Principal Investigator

This is the team leader of a research team who has the overall responsibility of conducting a research including but not limited to supervision and training of other participating investigators.

1.20 Product Test Agreement

This is a contract agreement between commercial vendors and research organizations whereby the commercial vendor wants research organizations to test and evaluate their product's development. The products may be software, chemical, equipment, among others.

1.21 Programme Coordinator

The Programme Coordinator is the leader of a research programme and is not necessarily the Principal Investigator.

1.22 Research and Training Curriculum Agreement

Universities and tertiary institutions are increasingly collaborating with research institutions to train their students and it is necessary therefore that a collaborating research institution develops its own Research and Training Curriculum Agreement for training students from universities and tertiary institutions in Aquatic Sciences. This agreement is the basis of defining the scope of collaboration in training the students in the desired curriculum.

1.23 Research Contract

It is a legal document that defines the terms and conditions under which the research will be undertaken at KMFRI. The research may be a sponsored project, institute project or programme research.

1.24 Research Deed

It is a legal document that acknowledges the organization's right to intellectual property arising directly from its staff's participation in a sponsored project.

1.25 Research Misconduct

This refers to any action of fabrication, falsification, plagiarism, or other practices that seriously deviate from those commonly accepted practices within the scientific community of scholars in conducting, reviewing, reporting research data and information. Research misconduct also includes retaliation of any kind against a person who reported or provided information about suspected or alleged misconduct and who has not acted in bad faith. However, research misconduct does not include honest error or honest differences in interpretations or judgments.

1.26 Research Participation Agreement

This is a form of sponsored project in which organization's scientific and technical personnel and laboratory facilities are employed on behalf of external parties or outside users. In this agreement, a significant portion of the responsibility for the intellectual direction and interpretation is by the external party or outside user. A good example of this work arrangement is consultancy. There is need to establish a criteria for the Research Participation Agreement and their process for approval.

1.27 Sponsored Projects

Sponsored projects are defined as externally-funded activities typically with project agreements entered between the sponsor and the collaborating institution. Sponsored projects are characterized by a statement of work, financial accountability, disposition of tangible properties (equipment, vehicles, records and technical reports) or intangible properties (rights in data, copyrights and inventions).

1.28 Technical Expenses

Salaries of Principal Investigators and technical staff, laboratory and other technical expenses, shall be treated as direct technical costs.

1.29 Volunteer(s)

These are trained technicians, technologists and graduates from tertiary institutions and universities wishing to make a career in the Aquatic and Fisheries Research disciplines and who are ready to offer their services at no cost to the research institution and in so doing not only contribute to the profession but also enable themselves to gain expertise to enhance their skills.

ANNEX 2: RESEARCH PARTICIPATION AGREEMENT FOR KMFRI STAFF

In order that KMFRI may fulfil its mandate as per Cap 250 of the Science and Technology Act, legal and contractual obligations to sponsors of research and in consideration of my employment by KMFRI as a researcher, or my participation in sponsored research, or my use of funds, facilities or other resources provided by KMFRI, I hereby agree with as follows:

1. I abide with the terms of the KMFRI Research Policy;
2. I affirm to disclose any invention which concurred or practiced arising from my research in the course of my employment at KMFRI, or from participating in work directly related professional or employment at KMFRI including consultancies or from work carried out on KMFRI time, or at KMFRI expenses, or resources under grants or otherwise.
3. I shall appropriately assign to KMFRI any invention as prescribed in the KMFRI Research Policy;
4. I shall fully cooperate with KMFRI and/or its agent in the preparation and prosecution of patents, in the registration of copyrights for works I have participated in;
5. I accept the provisions of sharing research funds, consultancy fees and royalties from patented inventions as provided for in the KMFRI Research Policy;
6. I agree that this agreement is effective from the date of my employment at KMFRI.

NAME : -----

SIGNATURE : -----

DATE : -----

PERSONAL NUMBER : -----

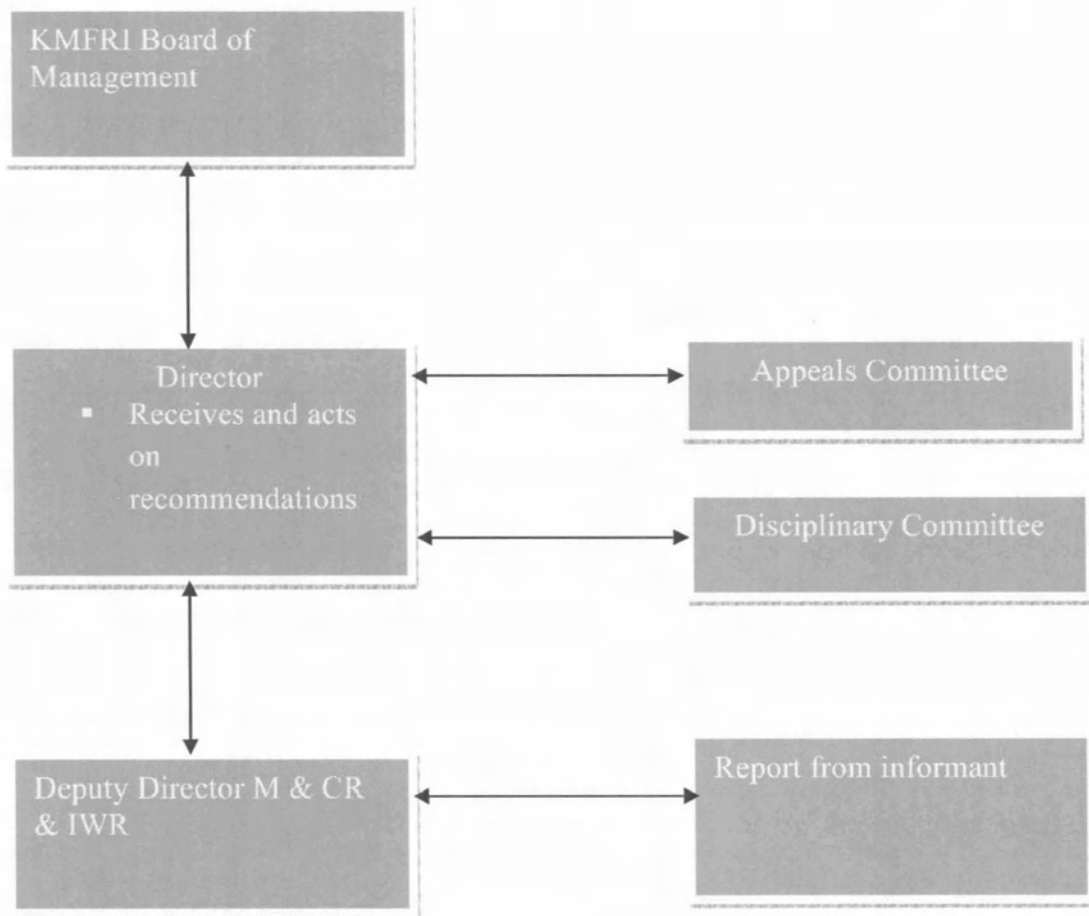
ANNEX 3: PROCEDURE FOR INVESTIGATING AND REPORTING OF RESEARCH MISCONDUCT

The processing of an allegation will be guided first by the following principle that requires protecting the rights and reputation of all parties involved which include the accused and the individual or individuals who in good faith report the alleged misconduct. All aspects of the investigation shall be handled confidentially. The following steps shall be taken:

- (a) Inquiry into an alleged misconduct for validation by concerned heads of research;
 - (i) An individual or individuals who have in good faith a cause to file an allegation of misconduct against an investigator will write to the Deputy Director (Marine and Coastal Research or Inland Waters Research). The latter will initiate a confidential inquiry by notifying the appropriate individuals in the research chain of responsibility to conduct a confidential inquiry. The purpose of this initial exercise is to validate the allegation and the process should be completed within a month of receipt of the allegation.
 - (ii) When the inquiry is completed, all affected individuals shall be given the opportunity to comment on the findings of the inquiry concerning the alleged misconduct.
 - (iii) If the alleged misconduct is not substantiated by the inquiry, formal efforts through the Deputy Director (Marine and Coastal Research or Inland Waters Research) will be made to restore the reputations of the researcher and all other affected individuals.
 - (iv) Any person aggrieved by any action proposed as a result of the inquiry shall have the right to appeal to the Director in writing within a month of notification.
- (b) Where inquiry report has established a case for substantive investigation by an appointed Committee;
 - (i) The Director will appoint a three-member investigative committee who will have broad experience in research and knowledge of the area of the alleged misconduct. Members of the investigative committee must not have served in the disciplinary committee.

- (ii) The Committee shall initiate a substantive confidential investigation with an aim of establishing whether or not the accused is guilty of the charges and should be disciplined.
- (iii) The Committee shall conclude within 3 months and hand over their report which includes their recommendations to the Director.
- (iv) If the committee finds that the allegations of misconduct have not been substantiated, formal efforts shall be made to restore the reputation of the research and others under investigation.
- (v) If the committee finds that the allegations of misconduct have been substantiated, then the committee may recommend disciplinary action, in which case the Director will accordingly determine the appropriate disciplinary action and report to the KMFRI Board of Management.

ANNEX 4: MECHANISMS FOR REPORTING AND DEALING WITH RESEARCH MISCONDUCT



ANNEX 5: ACKNOWLEDGEMENTS

KMFRI, through the office of the Director, wishes to acknowledge the comments and advice of the KMFRI Chairman of Board of Management, Prof. Peninah Aloo Obudho, and those of the entire KMFRI Board of Management that greatly enhanced the quality of this document and whose efforts are gratefully acknowledged.

The Director also wishes to acknowledge the dedicated efforts of the following members of the committee involved in the preparation of this policy:

Dr. Renison K. Ruwa	Deputy Director (Marine and Coastal Research): Committee Chairman
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Dr. Jared Bosire	Assistant Director (Marine and Coastal Research)
Dr. John Gichuki	Centre Director (Kisumu Centre)
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Special appreciation is also accorded to all members of Research and Technical Staff for their contributions.

Since its creation in 1980, Kenya Marine and Fisheries Research Institute (KMFRI) has been operating without a Research Policy. Research activities have been carried out without a document that guides research for effective service delivery. Therefore, the policy is fundamentally structured to include guiding principles, policy framework, institutional framework, monitoring and evaluation and implementation strategy. The research policy framework has its origins in the Science and Technology (Amendment) Act (1979), Cap 250 of the Laws of Kenya, which gives KMFRI mandate to undertake research in Marine and Freshwater fisheries, aquatic environmental and ecological studies, and physical oceanography. The scope and rationale of this policy includes: guiding in the formulation of research agreements in the sponsored projects, management of information and databases, handling and managing sponsored projects and ethics in research among others.

The implementation strategy takes into cognizance the governance environment where flexibility is required to accommodate emerging research and development issues identified by the Government from time to time including Kenya's Vision 2030, as well as research agenda from bilateral and multilateral agreements signed by the Kenya Government. KMFRI will continue to undertake research along these lines and as guided by the KMFRI Board of Management through its committee, the KMFRI Scientific and Technical Committee.

This policy will, therefore, serve to enhance efficiency and promote increased productivity in research undertakings. For effective implementation of the policy, an office will be established to link up with the Outreach and Social Responsibility office to offer a comprehensive advisory service on research products that can be patented and copyrighted.



Edited, Designed and Printed by:

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