



**KENYA WATER INSTITUTE**

**DRAFT STRATEGIC PLAN 2021- 2026**

**MAY 2021**

## **VISION STATEMENT**

A Technical Centre of Excellence in Training, Research, Innovation and Consultancy in the Water, Sanitation and Irrigation Sector

## **MISSION STATEMENT**

To offer Competency-Based Training, Research, Innovation, Consultancy and Outreach Services in the Water, Sanitation and Irrigation Sector for sustainable development

## **CORE VALUES**

Good Corporate Governance

Professionalism

Customer focus

Innovativeness

Inclusivity

Patriotism

Integrity

## Foreword

Kenya Water Institute (KEWI) is a State Corporation under the Ministry of Water, Sanitation and Irrigation (MWSI) established by the Kenya Water Institute Act No. 11 of 2001 to promote standards of service in the water sector through human resource development, research and consultancy. The Institute falls under the Environment, Water, Sanitation and irrigation sector whose goal is to attain “a clean, secure and sustainable environment” by 2030. The Kenya Constitution 2010 guarantees water as a basic human right under article 43. This has a lot of implications on the water sector players, including KEWI. The water sector institutions have to be managed efficiently and effectively, and this requires adequate and competent manpower and feedback on progress at all times. This calls for skilled manpower as well as innovative technologies in the sector. Ensuring that there is adequate manpower to run the sector institutions is part of KEWI’s mandate. KEWI has to plan strategically to ensure that the sector has a pool of qualified staff to run the institutions, as well as develop appropriate technologies that will enhance service delivery for customer satisfaction and national development.

Our 2021-2025 Strategic Plan sets out the Kenya Water Institute’s road map for the 5-year period ending in June 2025. The development of the Plan is informed by broad consultations with internal and external stakeholders, the primary objective being to secure concurrence on relevance and prioritization of activities. It forms a crucial guide in our journey to realize our vision “**A Technical Centre of Excellence in Training, Research, Innovation and Consultancy in the Water, Sanitation and Irrigation Sector**”. The Plan is built around Five Key Result Areas namely: Training and human resources development; Research, innovation and community outreach; Resource mobilization and consultancy services; Institutional capacity and Leadership and Integrity (Governance). These areas will enable the Institute to realize its vision and mission and thus fulfill the mandate for which it was formed. The plan has an inbuilt implementation matrix with activities, targets, resources required and persons responsible for implementation of the various activities. The cost for implementing the Plan is KShs. 38.14 Billion. The strategic plan is anchored on the Kenya Vision 2030 which aims to create a globally competitive and prosperous nation with a high quality of life for its citizens by the year 2030. **The plan has also been informed by the previous strategic plan, 2016-2020, by taking account the achievements, challenges, and the lessons learnt. The plan is aligned to the MTP III 2018-2022, the Big Four Agenda of Manufacturing, Food Security and Nutrition, Affordable Housing and access to Universal Health Care coverage, Global SDGs and Africa Agenda 2063.**

Ultimately our performance hinges on team work and commitment of all members of KEWI, to whom I express deep gratitude for their resilience while urging continued service with integrity, dedication and professionalism. Key to success will be the financial base and human resources capacity to drive the reforms and transformations envisioned in the plan. The Governing Council is committed to the challenge of mobilizing adequate resources through forging beneficial partnerships with other organizations and collaborators in the water sector to enable the institute realize its vision and mission.

I wish to conclude by underscoring the importance of close collaboration with all our stakeholders and the Government and its agencies, especially the National Treasury, in spearheading the Institute’s transformation as outlined in this strategic plan to promote standards of service in the water sector through human resource development, research, innovation and consultancy in water, sanitation and irrigation sectors.

**Chairperson  
Governing Council**

## Preface

The Water and Sanitation Sector in Kenya has undergone comprehensive reforms since 1999 in order to improve the management and development of the scarce water resources and deliver quality services to consumers throughout the country. The latest reforms are provided for the Constitution in 2010. This notwithstanding, Kenya Water Institute (KEWI) which was established by the Kenya Water Institute Act (No 11 of 2001) has retained its mandate. And with the review of the act, it has given KEWI a broader mandate

The Act gives the Institute the mandate to provide directly or in collaboration with other institutions of higher learning, services in human resource development, consultancy, research, innovation and development, among others, in the water, sanitation and irrigation sectors on a commercial basis.

KEWI has lived to its mandate by offering quality products and services. However, this has not been without challenges. Major challenges include inadequate physical infrastructure and equipment, inadequate funding and shortage of staff among others. These challenges require focused management and governance, hence the significant role of strategic planning in the running of the affairs of the Institute. To overcome these challenges, KEWI has continuously developed and implemented strategies, some of which have been achieved whereas others have been a basis for learning and adequate planning for continuous improvement.

Strategic planning is now generally accepted as the foundation of good leadership and management in any organization, be it public or private. This Strategic Plan covering the period 2021-2025 builds on the second strategic plan which ended on 30<sup>th</sup> June, 2020. It sets out the Vision, Mission and Objectives of Kenya Water Institute. It gives emphasis to institutional and human capacity development and governance, which is critical for sustainability of the Institute. This Strategic Plan will enable the Institute take advantage of the opportunities available, and to address the challenges that could impede the Institute's progress in the next five years with the ultimate aim of transforming, growing and repositioning the Institute to adequately address the sector challenges.

**I wish to conclude by underscoring the importance of close collaboration with all our stakeholders and the Government and its agencies, especially the National Treasury, in spearheading the Institute's transformation as outlined in this strategic plan to promote standards of service in the water sector through human resource development, research , innovation and consultancy in water, sanitation and irrigation sectors.**

**Prof. P Hayombe (PhD)**  
**Director/ Chief Executive Officer**

## **Definition of Terms**

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## **ACRONYMS AND ABBREVIATIONS**

CoK- Constitution of Kenya  
CSR -Corporate Social Responsibility  
EAC - East African Community  
GC- Governing Council  
IFMIS -Integrated Financial Management System  
ICT -Information Communication Technology  
KEWI - Kenya Water Institute  
KNBS - Kenya National Bureau of Statistics  
MCDAs - Ministries, Counties, Departments and Agencies  
MWSI - Ministry of Water, Sanitation and Irrigation  
MPU -Mechanical Production Unit  
NACOSTI -National Commission for Science and Technology  
SBU -Strategic Business Unit  
SDGs Sustainable Developments Goals  
TNA -Training Needs Assessment  
UN - United Nations

## Executive Summary

The Strategic Plan of the Kenya Water Institute has been developed in cognizance of the Kenya Vision 2030, the Constitution of Kenya and other legal and policy documents. The implementation of this Strategic Plan is based on stakeholder participation, good governance and a professional approach to doing business. The Institute is envisaged as “A Technical Centre of Excellence in Training, Research, Innovation and Consultancy in the Water, Sanitation and Irrigation Sectors” The mission of the Institute is “To offer Competency-Based Training, Research, Innovation, Consultancy and Outreach Services in the Water, Sanitation and Irrigation Sector for sustainable development”

**Chapter One** of the Strategic Plan presents the historical development of the Institute. It also provides the institutional framework which expounds on the mandate as stipulated in the reviewed Kenya Water Institute Act, 2001. It also presents the national agenda and developmental challenges outlined in the Kenya Vision 2030 framework, the role of the water sector in the achievement of the Kenya Vision 2030 and the role of KEWI in implementing MTP III, 2018-2022, the Big Four Agenda of Manufacturing, Food Security and Nutrition, Affordable Housing and access to Universal Health Care coverage, Global SDGs and Africa Agenda 2063.

**Chapter Two** expounds on the situational and environmental analyses indicating how they affect the Institute using the Strengths, Challenges, Opportunities and Threats (SCOT) and Political, Economic, Social-Cultural, Technological, Environmental and Legal (PESTEL) models. A stakeholder analysis was done to identify the key stakeholders, their expectations and KEWI’s expectations from them.

**Chapter Three** presents the Strategy Focus of the Institute, which includes the Vision, Mission, Motto, Core Values, Key Result Areas, Strategic Objectives and Strategies. The Five Key Result Areas which drive the Strategy Focus are:

1. Training and human resources development;
2. Research, innovation and community outreach;
3. Resource mobilization and consultancy services;
4. Institutional capacity and
5. Leadership and Integrity (Governance)

These will be achieved through the following strategic objectives:

1. To improve access, quality and relevance of training programmes and increase enrolment from 1585 to 10,000 by 2025.
2. To increase research outputs through 50 publications, 2 patents , 5 innovations and 47 outreach by 2025
3. To enhance KEWI financing by mobilizing Kshs. 38.14 Billion to support programmes and projects by 2025
4. To increase KEWI staff establishment from the current 30% of the approved establishment to 80% and enhance their skills and competencies.
5. To expand KEWI physical infrastructure in all Campuses (movable and immovable assets) capacity to provide for an additional 8415 students moving from the current 1585 10,000 by 2025
6. To strengthen internal corporate governance systems

**Chapter Four** analyses KEWI’s resource capacity by highlighting the organizational structure and staffing levels. The chapter also presents the financial projections for the strategy and appropriate implementation and coordination mechanism which identifies what the Institute must do before, during and post implementation. Risk factors which may affect the implementation of the Strategic Plan have been identified and appropriate mitigating factors recommended.

**Chapter Five** highlights the monitoring, evaluation and reporting framework.

## **CHAPTER ONE: INTRODUCTION**

### **1.0 Overview**

This Chapter of the Strategic Plan presents the historical development of the Institute. It provides the institutional framework which expounds on the mandate as stipulated in the Kenya Water Institute Act, No. 11 of 2001. Global, Regional and National Development Challenges - specific to the mandate of the organization and the Organization's Development Role vis-à-vis the national development agenda – Kenya Vision 2030, the Third Medium Term Plan (2018 – 2022), the “Big Four” Agenda, SDGs, Africa's Agenda 2063, among other national and international obligations are also included.

### **1.1 Background**

Kenya Water Institute (KEWI) is a State Corporation under the Ministry of Water, Sanitation and Irrigation (MWSI) established by the Kenya Water Institute Act No. 11 of 2001 to promote standards of service in the Water, Sanitation and Irrigation sector through human resource development, research, consultancy and outreach. The Institute falls under the Environment, Water, Sanitation and Irrigation sector whose goal is to attain “a clean, secure and sustainable environment” by 2030.

Kenya Water Institute started in 1960 as a unit in the Hydraulic Department of Public Works to train water supply operators. The unit was upgraded to a training section under the same Department in 1970. When the Water Department was transformed to a fully-fledged Ministry of Water Development in 1974, the training section became the Water Development Staff Training School. In 1985 the Staff Training School was transformed into a National Water Training Institution and thus the name Kenya Water Institute. In October 2004, the Applied Water Research department of the Ministry of Water and Irrigation was transferred to KEWI. Since then KEWI has been involved in providing Training, Research and Consultancy and Outreach services for the entire Water sector.

As the Institution charged with the responsibility of capacity building for the water, sanitation and irrigation sector, it plays a key role of addressing the human resource needs and provides solutions to challenges facing the sector. Being a public Training and Research Institution, the Institute is also governed by other legislations and policy guidelines relevant to its nature of business. KEWI currently has four campuses namely, Nairobi, Kisumu, Kitui and Chiakariga campuses located in Nairobi, Kisumu, Kitui, and Tharaka Nithi Counties, respectively.

### **1.2 Mandate/functions of the organization**

The mandate of KEWI as outlined in the Kenya Water Institute Act, No. 11 of 2001 is:

- 1) To provide directly or in collaboration with other institutions of higher learning, services in human resource development, Consultancy, Research and Development in the water sector on a commercial basis to the public sector, state corporations, local authorities, the private sector and all other persons (local or foreign) who may request for such services from the institute;
- 2) To provide training programmes, seminars and workshops and produce publications aimed at maintaining standards in the water sector;
- 3) To provide a forum for effective collaboration between the public and private sectors and other interested parties for the development of the water sector; and
- 4) To conduct examinations and award diplomas, certificates and other awards to successful candidates.

## 1.3 Global, Regional and National Development Challenges

### 1.3.1 Global Challenges

#### **Climate change**

Climate change affects water resources through its impacts on the quality, quantity. It is expected that there will be a significant impact on freshwater supplies with potential devastating effects on these resources such as shift in precipitation patterns and increase in the frequency of flooding and droughts. KEWI therefore has an opportunity to develop programmes and transfer technologies and that will ensure climate change adaptation and mitigation.

#### **Pandemics**

Training and learning have been greatly affected by the COVID-19 crisis. The application of solutions such as remote learning depends on many factors including access to electricity, internet connectivity, devices or media, learning platforms, and the preparedness of instructors and learners. Technical and Vocational Education and Training (TVET) Institutions have to continue implementing their mandate so as to remain viable. This presents an opportunity to KEWI through implementation of e-learning therefore increasing its capacity beyond what can be accommodated by the limited physical facilities.

#### **Rapidly changing technologies**

The rapid changes in technology globally require a highly trained workforce to design and operate the systems. This can present a challenge if the Institute does not keep abreast with the technological changes. Equally, it can also present an opportunity for increased demand for KEWI's services especially from the Water Service Providers (WSPs) adopting new technologies. In addition, expected high prices and maintenance costs of modern technological equipment and facilities needed for training is bound to be a major challenge.

### 1.3.2 Regional Challenges

#### **East African Community (EAC)**

The main objective of the EAC is to form a common trading block among the member states. This will not only open borders between member states but also create competition among service providers, including those in the education sector. This presents an opportunity for KEWI to significantly increase its market share in the wider East African region through Training Research and Consultancy.

### 1.3.4 National Development Challenges

1. **High poverty levels in the country-** Poverty remains one of the biggest challenges facing Kenya today. Over 40 percent of Kenya's population live below the poverty line. The level of poverty especially in the rural areas affects the ability of the sponsors to pay the requisite fees. This is a challenge which may undermine KEWI's ability to meet its revenue targets to effectively support its programmes.
2. **Water Scarcity and degradation-** Kenya is categorized as a water scarce country with renewable per capita freshwater below the UN recommended minimum of 1000m<sup>3</sup>. The growing population increases the demand for water for domestic use, food security and industrial development. In addition, surface and ground water resources in Kenya are increasingly becoming polluted by the activities of agriculture, increased urbanization, industry activities through effluent discharge, effects of garbage dumps, sediments. This is an opportunity for KEWI to offer programmes that address catchment management, including real-time monitoring systems and implement training and research programmes

such as non-revenue water management, rain water harvesting, desalination technologies and climate smart agriculture.

3. **High unemployment levels especially among the youth-** According to the Medium Term Plan (MTP III), 80 percent of the unemployed are youth. The minimal involvement of young people in gainful employment and economic participation as well as their exclusion from decision making poses a serious threat to the stability of the country. Currently, the country is facing a decline in job opportunities in the formal sector while the informal sector is increasingly becoming the source of employment. The demand for technical training and entrepreneurship skills from the populous young people may therefore present an opportunity for KEWI during this plan period.
4. **Matching skills to market demand-** One of the challenges facing graduates today is irrelevant skills in relation to skills needed by the industry. The country today is ensuring that the education and training provided by technical training institutions meets high quality standards and that the contents of the programmes are relevant to the needs of the economy. This will help in career progression and through this one will be able to meet the market demand.
5. **Underdeveloped ICT Infrastructure-** Slow deployment of ICT infrastructure affects technical training institutions to modernize training operations. KEWI has embraced blended and e-Learning. E-Learning will enable KEWI to tap from a wider market and thus increase access to its products and services and consequently its revenue, cut down on costs and benchmark with internationally recognized institutions in the water sector. The challenge with limited access to online learning platforms still makes it difficult for the lecturers, researchers and students to fully use technology in their respective academic and research areas.
6. **Gender Balance-** The participation of women in the institutions of higher learning and more particularly in the water, sanitation and irrigation sector is very low in Kenya, largely due to past traditional cultural values. In the past, a course in plumbing for example was alien to women. Women, therefore, are underrepresented in technical training institutions both as students and as employees/lecturers. KEWI encourages women students to apply for all courses during recruitment and also sensitizes students and communities through the outreach programme.
7. **Capacity constraints in water sector organizations-** Water works Development Agencies (WWDAs) are responsible for developing Water and Sanitation infrastructure in areas under their jurisdiction while direct provision of water is undertaken by Water Services Providers (WSPs). The WWDAs and WSPs however, have limited capacity to fulfil their roles effectively as evidenced by the high levels of non-revenue water. Improving the effective management of water resources and service delivery by these institutions requires scaling-up capacity in terms of human resources and technical competence through training. This is an opportunity that KEWI needs to take advantage of to support the WWDAs/WSPs to reduce their non-revenue water. KEWI has developed a wastewater and sanitation course meant to address capacity gaps in WSPs. It has also developed short courses/ refresher courses in water and sanitation management to address skills gap.
8. **Negative impacts of climate change-** Drought and floods are recurring phenomena in Kenya. These result in impacts such as food shortage, deterioration of water quality, conflicts in water use, power rationing and damage of the country's infrastructure. KEWI research and training on climate smart agriculture, climate change adaptation measures,

and water and soil conservation measures in its competency-based curriculum makes learners acquire hands-on experience to tackle such challenges.

9. **High reliance on rain fed agriculture** -The level of development of irrigation in the country is low compared to its potential. About 83 per cent of the country consists of arid and semi-arid land (ASAL) while only 17 per cent is arable. Furthermore, due to climate change the extent of ASAL is increasing. To achieve the goal of increasing the area under irrigation and increasing the sustainability of irrigated and drainage areas, KEWI, will continue building the capacity of the irrigation technicians and operators.

## **1.4 The Organization's Development Role**

KEWI's development role vis-à-vis the national development agenda – Kenya Vision 2030, the Third Medium Term Plan (2018 – 2022), the “Big Four” Agenda, SDGs, Africa's Agenda 2063, among other national and international obligations is discussed in sections that follow.

### **Kenya Vision 2030**

The country's development agenda as expounded in the Vision 2030, is to transform Kenya into a newly industrialized, middle- income country providing a high quality of life to its citizen with access to clean and safe water. The development will be achieved through phased development as spelt out in Medium Term Plans.

Under the Vision 2030, water is domiciled in the social pillar which seeks to build a just and cohesive society that enjoys equitable social development in a clean and secure environment. The Vision 2030 aims to ensure that improved water and sanitation are available and accessible to all by 2030. Since Kenya is a water scarce country, it is imperative that water sources are conserved and new ways of harvesting and using rain and underground water are adopted. Human resource development is one of the foundations that will support Vision 2030 and the overall development process. It is on the basis of this realization that Kenya aims to create a globally competitive and adaptive human resource base to meet the requirements of Vision 2030.

Consequently, Kenya Water institute will provide training, research, consultancy and outreach to improve the standards of the country's overall water resource management, storage and harvesting capability.

### **The Role of KEWI in implementing the third Medium Term (MTP III) Plan (2018 – 2022)**

The theme of MTP III is Transforming Lives: Advancing socio-economic development through the “Big Four Agenda”

Given the significance of Water, Sanitation and Irrigation in the socio-economic development and to the quality of life of the people of Kenya, the need for well trained and qualified water professionals is paramount. The ambitious targets as set by the third Medium Term plan require enhanced capacity by the implementers in the form of training, research, consultancy and outreach. Hence KEWI is expected to:

- i. Develop a critical mass of competent water technicians who are innovative and creative and can effectively apply latest technologies and contribute to the growing water sector in Kenya;
- ii. Offer competency-based training and capacity building for improved service delivery in the Environment, water and sanitation sector;
- iii. Offer consultancy services to the Environment, water and sanitation sector;

- iv. Strengthen research to inform policies, applied research and decision making in the sector;
- v. Strengthen linkages and partnerships for sustainable development.

Under research KEWI will operationalize the water resource centre at KEWI, establish a sewerage research centre in Kisumu, establish a water sector research funding mechanism to support water research projects as well as undertake capacity building and provide technical assistance at County level.

### **KEWI'S role in advancing Big Four Agenda**

Water is a crucial enabler of the Big Four agenda rolled out by the National Government. This Agenda emphasizes on the need for efficiency and better management in the utilization of natural resources to enable the government achieve its strategic goals of economic growth, poverty reduction and social stability. "Big Four" Agenda shall form the basis for identifying national development priorities and establishing deliverables under the Institute's Performance Management System. As an enabler to the 'Big Four' Agenda under the Ministry of Water, Sanitation and Irrigation, the Institute will; through its training research and education offered, provide reliable information on water and sewerage/sanitation services to manufacturing, universal healthcare, affordable housing and food & nutrition security in the next five years, in line with Vision 2030.

KEWI is charged with the responsibility in the National Development to produce graduates with the right skills, knowledge and attitudes for the Water, Sanitation, Irrigation Sector. It will also develop programmes aimed at constant re-training and technological learning according to the sector needs.

In response to the Big Four Agenda, the Institute will develop and implement strategies that focus on key areas central to the realisation of its role in the National development.

The Institute continues to facilitate proper training and research and of water technological solutions to the community for improved livelihoods. Vision 2030 places emphasis on Science, Technology and Innovation (ST&I) as a foundation for the socio-economic transformation of the country. The Institute will continue to develop and implement relevant programmes through an inclusive approach in collaboration with stakeholders.

The Institute will also continue to expand access and provide inclusive and quality education, training and research that nurture a globally competitive workforce; to drive the economic growth and development agenda of the country.

### **Sustainable Development Goals**

Kenya intends to become a knowledge-led economy where the creation and use of knowledge will be among the most critical factors for rapid economic development. KEWI has a significant role to play in this sector through training, capacity building and research.

The Government of Kenya is committed to the attainment of the United Nations Sustainable Developments Goals (SDGs) as agreed upon by the international community. SDGs are universal and they address the economic, social and environmental dimensions of sustainable development in a comprehensive and integrated manner.

KEWI and other players in the water and sanitation sector in Kenya are expected to play a key role in attainment of sustainable development goal No. 6 which is to ensure availability and sustainable management of water and sanitation for all. In addition, KEWI will play a central role in the achievement of sustainable development goal No. 2 which is to ensure end to hunger, achieve food security and improved nutrition and promote sustainable agriculture. The two SDG goals will be



achieved through training competent graduates and technicians to undertake irrigation and water development projects.

### **Africa Agenda 2063**

Africa's Agenda 2063 is Africa's long-term vision to achieve the collective aspirations of the continent, "The Africa We Want". It is a strategic framework for the socio-economic transformation of the continent over the next 50 years. It is being implemented through ten-year implementation plans. MTP III has incorporated the priorities of the First Ten-Year Implementation Plan (2014-2023).

Aspiration 1 (13) Africa's agriculture will be modern and productive, using science, technology, innovation and indigenous knowledge. The hand hoe will be banished by 2025 and the sector will be modern, profitable and attractive to the continent's youths and women. Kenya Water Institute aims to ensure food and nutrition security, through training competent graduates and technicians in irrigation and drainage technology.

In addition, water is critical to achieving Agenda 2063 development goals and aspirations. Aspiration 1 (18) of Africa we want envisions that Africa shall have equitable and sustainable use and management of water resources for socio-economic development, regional cooperation and the environment.

Towards this, the Institute, during the plan period will implement Integrated Water Resources Management principles on all the strategies required as per the Water Act 2016 and implement key priority programmes aligned to offering competency-based training, research, technology transfer, consultancy and advisory services in the water, sanitation, irrigation and related sectors.

## CHAPTER TWO: SITUATION ANALYSIS

### 2.0 Overview

This chapter provides a situational analysis of KEWI’s performance for the period 2016-2020. It reviews the previous Strategic Plan Implementation, highlighting key achievements (milestones), challenges faced, and lessons learnt. The chapter further undertakes environmental scan, using the Strengths, Weaknesses, Opportunities and Threats (SWOT) and Political, Economic, Socio-cultural, Technological, Environmental and Legal (PESTEL) analysis. A stakeholder analysis matrix is also provided with the aim of ensuring the expectations of stakeholders are included in planning process.

### 2.1 Review of the previous strategic plan 2016-2020 implementation

#### 2.1.1 Milestones/key achievements

A review of the strategic plan 2016-2020 was done and the Table 2.1 presents the findings on the extent of results achieved during the plan period.

**Table 1.1: Summary of key achievements /milestones**

Key Result Area	Strategic Objective	Key Target	Achievements
<b>Training</b>	To improve access, quality and relevance of training programmes	Diversify and modernize training programmes to meet new emerging sector needs	<ul style="list-style-type: none"> <li>• Labour market survey conducted</li> <li>• KEWI Level 5 and 6 Programmes reviewed in collaboration with CDACC to make them Competency-based</li> <li>• New Short-Courses developed and implemented; Capacity Building for County Governments conducted</li> </ul>
		Roll-out e-learning and evening programmes	<ul style="list-style-type: none"> <li>• E-modules developed</li> <li>• Lecturers trained on e-learning implementation;</li> <li>• Students enrolled on e-learning</li> </ul>
		Enhance training programmes for county water institutions	<ul style="list-style-type: none"> <li>• Capacity Building for County Governments conducted</li> </ul>
		Enhance quality assurance in curriculum delivery	<ul style="list-style-type: none"> <li>• Quality, Compliance and Risk Assurance Department established</li> <li>• Programs reviewed</li> </ul>
		Strengthen examination management	<ul style="list-style-type: none"> <li>• Examination centre upgraded</li> <li>• External examiners engaged</li> </ul>
		Improve student welfare services	<ul style="list-style-type: none"> <li>• One (1) medical facility in Nairobi established</li> <li>• Collaborative agreements signed with neighbouring health facilities for campuses</li> </ul>

		Strengthen hands on and practical training	<ul style="list-style-type: none"> <li>• Training Manuals reviewed and practical training manuals developed</li> </ul>
		Enhance Management of Short Training Programmes	<ul style="list-style-type: none"> <li>• Short courses policy developed and implemented</li> <li>• New short courses developed</li> </ul>
		Integrate Research and Development in training	<ul style="list-style-type: none"> <li>• Academic staff trained on development of research proposals</li> </ul>
<b>Applied Water Research, Technology Development and Transfer</b>	To upgrade the research function of the Institute	Enhance enabling policy and legal framework	<ul style="list-style-type: none"> <li>• KEWI registered with NACOSTI as a research Institution</li> <li>• KEWI research policy reviewed and implemented</li> </ul>
		Enhance quantity and quality of research	<ul style="list-style-type: none"> <li>• Geo- Information centre established</li> <li>• Papers published in journals</li> <li>• Papers presented in conferences</li> <li>• Research newsletters published</li> <li>• Research funds mobilized through proposals development</li> <li>• Collaborative research implemented</li> </ul>
		Strengthen partnerships and collaborations in research	<ul style="list-style-type: none"> <li>• Water education and training manuals developed</li> <li>• Collaborative Outreach projects undertaken</li> </ul>
		Enhance dissemination of research findings	<ul style="list-style-type: none"> <li>• Research setting agenda forum held</li> <li>• Research Newsletters produced</li> <li>• Community outreach and school sensitization done</li> <li>• E-outreach projects done (Radio and TV)</li> </ul>
		Enhance innovations	<ul style="list-style-type: none"> <li>• Young innovators programme concept developed</li> </ul>
		Enhance technology transfer and outreach	<ul style="list-style-type: none"> <li>• Technology based exhibitions held</li> </ul>
<b>Consultancy and Advisory Services</b>	To strengthen consultancy	Enhance Consultancy Capacity	<ul style="list-style-type: none"> <li>• Activities identified to fall under the Strategic Business Unit (SBU) continued to be implemented</li> </ul>

	and advisory services		<ul style="list-style-type: none"> <li>• Employee competencies documented</li> <li>• Staff trained on grant proposal writing</li> </ul>
		Increase consultancy and advisory services in the water sector at National, County, regional and international levels;	<ul style="list-style-type: none"> <li>• Responses to calls for Expression of Interest and Requests for Proposals submitted</li> <li>• Consultancies carried out ( water analysis, drilling, capacity building)</li> </ul>
<b>Customer Focus</b>	To meet and exceed customer expectations	Conduct customer satisfaction survey annually and implement survey recommendations	<ul style="list-style-type: none"> <li>• Customer satisfaction surveys done</li> </ul>
		Review the service charter Implement the service charter	<ul style="list-style-type: none"> <li>• Service charter reviewed and the institution complied to service delivery charter</li> </ul>
		Train staff on customer service	<ul style="list-style-type: none"> <li>• Staff Trained on Customer Care</li> </ul>
		Improve corporate social investment	<ul style="list-style-type: none"> <li>• Corporate Social Responsibility (CSR) done (monthly clean-up in collaboration with Nairobi county and other stakeholders)</li> </ul>
		Strengthen communication and public relations	<ul style="list-style-type: none"> <li>• Draft strategies developed (Communication Strategy, Communication Crisis framework, Public Relations Strategy)</li> </ul>
		Ensure compliance with relevant laws, regulations, national values and principles of good governance	<ul style="list-style-type: none"> <li>• Executive directives implemented</li> <li>• GC trained on Principles of Good Governance</li> <li>• Performance contracts implemented</li> <li>• Staff sensitized on national values and good governance</li> </ul>
		Strengthen audit, internal controls and systems	<ul style="list-style-type: none"> <li>• Staff sensitized on corruption prevention</li> <li>• Planning, resource mobilization and business development department established</li> </ul>

			<ul style="list-style-type: none"> <li>• Risk management plan updated</li> <li>• Staff sensitized on Public Officers Ethics Act</li> <li>• Systems control audits done</li> </ul>
		Ensure optimal human resource management	<ul style="list-style-type: none"> <li>• Schemes of service reviewed</li> <li>• Annual performance appraisals undertaken</li> </ul>
<b>Institutional Capacity</b>	To strengthen internal corporate governance systems	Strengthen human resource development and succession management	<ul style="list-style-type: none"> <li>• Training needs assessment (TNA) conducted</li> </ul>
		Strengthen staff welfare and provide conducive work environment	<ul style="list-style-type: none"> <li>• Staff medical scheme procured</li> <li>• Staff welfare group formed</li> <li>• Security services provided</li> </ul>
		Enhance resource mobilization and optimization of financial resources	<ul style="list-style-type: none"> <li>• pricing strategy developed and implemented</li> <li>• Response made to calls for competitive grants</li> </ul>

### 2.1.2 Challenges (faced during the implementation of the previous plan)

During the previous Strategic period 2016-2020, KEWI experienced various challenges that constrained full achievement of the above strategic objectives. Some of the key challenges were:

1. The Institute did not have adequate number of staff to effectively and efficiently execute the Strategic Plan;
2. Remuneration for staff has not been reviewed for the last ten years. Salaries Review Commission recently approved the new scale to be implemented in this financial year (2020-2021) as funds allow.
3. The Institute was highly dependent on the exchequer for funding, hence inconsistent and reduced disbursement of grants impacted on the implementation of the Strategic Plan.
4. There is inadequate financial capital to upgrade training and research facilities to acceptable and competitive standards with peer institution locally and the region.
5. Low AIA Generation: Since the onset of COVID-19 pandemic in Kenya in March 2020, the Institute was closed. Thus, the Institute has lost revenue from student fees revenue stream (approximately 40% of revenue). Additionally, the other revenue streams, such as short courses, seminars & workshops, consultancy, drilling, among others have recorded no or very minimal revenue.
6. Academic staff hardly engages in research and outreach activities to improve their training skills. This is due to high academic workload per semester that consumes time for research, outreach and consultancy services.
7. Students are also not able to access Higher Education's Loans Board (HELB) loan facility because there is none in place.
8. Covid-19 related challenges which led to the closure of educational institutions negatively impacted in the institute. Further; the institute was identified as an isolation center and also hosting of paramedics managing the pandemic.

9. The institute is having dilapidated and obsolete equipment in terms of building (furniture, classroom, office space, hostels), vehicles, machinery and equipment. Lack of maintenance and service of these facilities due to inadequate funding has continued to impair their functions.

### **2.1.3 Lessons Learnt (from the implementation of the previous plan)**

The following lessons were learnt from implementation of 2016-2020 Strategic Plan and form a basis for better implementation of this strategic plan:

- 1) Adequate institutional capacity is necessary for effective implementation of Strategic Plan.
- 2) Resource mobilization strategies are essential to support implementation of the programmes, projects and activities in the Strategic Plan.
- 3) Structured stakeholder participation, partnerships and collaborations in training, research consultancy and outreach are key to successful implementation of the planned activities.
- 4) A strategic plan can be effective only when key individuals understand the nature of strategic planning and do not allow day to day demands to take precedence over actions required to carry out the plan.
- 5) Develop joint proposals with relevant stakeholders and lobby policy makers for buy-in a co-production of knowledge as a co-learning process. The community, academia, industry and policymakers should be facilitated to participate in proposal formulation, inception and implementation
- 6) KEWI to establish a research journal (on-line) to allow academic staff and student to publish their findings (innovation, creativity, invention, technology transfer) in the long-run but also develop a repository (web-based) for information sharing.
- 7) Develop Memorandum of Understanding (MoU) with water sector institutions, public and private universities to facilitate research, outreach and consultancy collaboration, partnerships and linkages.
- 8) Collaborative framework between Kenya Water institute and county governments is essential.
- 9) KEWI to organize annual and/or bi-annual conference to enhance visibility, publicity and dissemination and information sharing.
- 10) All KEWI staff (Academic and Non-Academic) with requisite skills and expertise in other disciplines to participate in research, outreach and consultancy services (economics, accounts, procurement, governance, maintenance). This will promote collaborative research in knowledge generation as a trans-disciplinary and multi-disciplinary process
- 11) KEWI Campuses of Kisumu, Chiakariga, Kitui and Nairobi will function as specialized Research Centre's and/or field stations equipped with tools to generate data for localized situations. This will also promote detailed analysis of regional water basin priority areas.
- 12) Establish a Strategic Business Unit to manage consultancy and technical services to operate on Cost-Benefit Analysis framework to enhance revenue generation.

## **2.2 Environmental Scan**

A Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis, a Political, Economic, Social, Technological, Environmental and Legal (PESTEL) Analysis and Stakeholder analysis was undertaken to know the environment KEWI is operating in.

### **2.2.1 Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis.**

KEWI identifies with the following strengths, weaknesses, opportunities and threats which have strategic implications necessitating strategic responses (Table 2.2.1). These strengths,

weaknesses, opportunities and threats include:

**Table 2.2.1: Strengths, Weaknesses, Opportunities and Threats and Strategic Responses**

<b>Strengths</b>			
	<b>Strengths</b>	<b>Strategic Implication</b>	<b>Strategic Response</b>
1)	Kenya Water Institute Act No. 11 of 2001	<ul style="list-style-type: none"> <li>• Provides for training, research and consultancy</li> <li>• Mandates the Institute to award Diplomas and Certificates to qualified students.</li> <li>• Goodwill from the Government</li> <li>• High confidence levels from stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Full understanding and implementation of the Act</li> <li>• Marketing and branding to enhance KEWI visibility and publicity as well as increased intake.</li> <li>• Opportunity to position as the Certification and Licensing body to water professionals, technicians, technologist, craft-artisans in the Country.</li> <li>• Lobby for more funding from the government</li> <li>• Hold stakeholders forums to enhance their understanding of KEWI mandate in human resources</li> </ul>
2)	Governing Council in place	<ul style="list-style-type: none"> <li>• Governing Council provides oversight in resource management.</li> <li>• Provide policy direction</li> </ul>	<ul style="list-style-type: none"> <li>• Oversight of prudence resource management</li> <li>• Maintain stakeholder confidence</li> </ul>
2)	The Academic Board	<ul style="list-style-type: none"> <li>• Preside over quality teaching, training, lecturing, practicals, demonstrations, student project conceptualization, and superintend industrial attachment, student counseling, mentorship and guidance.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure production of competent and professional students that are readily absorbed in the labour market (employed and self-employed) and also possess entrepreneurial and leadership skills for the water industry.</li> </ul>
3)	Four operating Campuses in four Counties	<ul style="list-style-type: none"> <li>• Each campus has a niche to serve the respective regions</li> <li>• Improved access to KEWI programmes in the Counties</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthen the capacity of the campuses</li> <li>• Expand campuses to other geographical regions</li> </ul>
4)	Strategic location of KEWI Campuses (close proximity to Urban areas)	<ul style="list-style-type: none"> <li>• Extending learning to majority of working population</li> <li>• Improved access to KEWI Programmes</li> </ul>	<ul style="list-style-type: none"> <li>• This opportunity can be harnessed for both evening and Saturday classes</li> <li>• Increase revenue to the institution</li> </ul>
5)	Corporation Organogram that correspond to the mandates of KEWI	<ul style="list-style-type: none"> <li>• Clear lines of authority and responsibility, which facilitates rapid communication and allows a quicker response to</li> </ul>	<ul style="list-style-type: none"> <li>• Facilitate the implementation of KEWI mandate</li> </ul>

		operational issues.	
6)	Digital learning space (E-learning)	<ul style="list-style-type: none"> <li>Extended learning to majority of working population</li> <li>Improved access to KEWI Programmes</li> <li>Information and Knowledge sharing</li> </ul>	<ul style="list-style-type: none"> <li>increase training opportunities through Online programmes</li> <li>Maximizing e-learning, e-resources for long and short-term course</li> </ul>
7)	Experienced staff	<ul style="list-style-type: none"> <li>Quality service delivery</li> <li>Improved productivity</li> <li>Customer loyalty</li> </ul>	<ul style="list-style-type: none"> <li>Continuous training of staff</li> <li>Optimal utilization of staff</li> </ul>
8)	Available space for infrastructural Development	<ul style="list-style-type: none"> <li>Opportunity for expansion</li> </ul>	<ul style="list-style-type: none"> <li>Implement master plans</li> </ul>
9)	Local, regional and international partnerships, collaborations and Linkages	<ul style="list-style-type: none"> <li>Improved technical capacity</li> <li>Increased business revenues</li> <li>Potential for further business growth</li> </ul>	<ul style="list-style-type: none"> <li>Sign Memoranda of Understanding with new partners</li> </ul>
<b>Weaknesses</b>			
	<b>Weakness</b>	<b>Strategic Implication</b>	<b>Strategic Response</b>
1)	Inadequate financial resources	<ul style="list-style-type: none"> <li>Inability to upgrade training and research facilities to acceptable and competitive standards</li> </ul>	<ul style="list-style-type: none"> <li>Diversify sources of revenue</li> </ul>
2)	Inadequate Infrastructure, equipment, facilities, for research and training	<ul style="list-style-type: none"> <li>Students lack exposure to modern technology</li> <li>Quality of product/ service delivery is compromised</li> </ul>	<ul style="list-style-type: none"> <li>Construct and equip physical facilities</li> <li>Request development partners for financial and in-kind donations</li> <li>Partnerships and collaborations</li> </ul>
3)	Lack of skills, and expertise among lecturers to perform gainful research activities	<ul style="list-style-type: none"> <li>No development of bankable concepts and proposals for funding.</li> </ul>	<ul style="list-style-type: none"> <li>Retooling of academic staff with skills and expertise to formulate bankable research concepts and proposals.</li> <li>Recruit highly skilled staff</li> </ul>
4)	Lack of dedicated platform for disseminating research results/ Information Sharing	<ul style="list-style-type: none"> <li>The institute is ranked low in the webo-metric.</li> <li>The institutional knowledge generation (innovation, creativity, invention) are not known externally.</li> </ul>	<ul style="list-style-type: none"> <li>Develop joint proposals with relevant stakeholders</li> <li>Establish a research journal (on-line); annual and/or bi-annual conference</li> <li>Campuses to function as specialized Research Centres or field stations</li> </ul>
5)	Low visibility	<ul style="list-style-type: none"> <li>Low business growth</li> <li>Low enrollment</li> </ul>	<ul style="list-style-type: none"> <li>Rebrand KEWI</li> <li>Aggressive marketing</li> </ul>
<b>Opportunities</b>			
	<b>Opportunity</b>	<b>Strategic Implication</b>	<b>Strategic Response</b>



1)	Water sector reforms	<ul style="list-style-type: none"> <li>• Opportunity to address human capital demand</li> </ul>	<ul style="list-style-type: none"> <li>• Review of the Kenya Water Institute Act No.11 2001</li> </ul>
2)	Water Resource Centre (WRC)	<ul style="list-style-type: none"> <li>• Revenue generation</li> </ul>	<ul style="list-style-type: none"> <li>• Host seminars, workshops, conferences and exhibitions</li> <li>• WRC Operationalized as a Data Repository Centre/ Information Centre in the Water, Sanitation and Irrigation sector</li> </ul>
3)	Research Laboratory	<ul style="list-style-type: none"> <li>• Revenue generation</li> </ul>	<ul style="list-style-type: none"> <li>• Procurement of necessary equipment</li> </ul>
4)	Drilling Activity	<ul style="list-style-type: none"> <li>• Revenue generation</li> </ul>	<ul style="list-style-type: none"> <li>• Establish a Strategic Business Unit to manage consultancy and technical services</li> </ul>
5)	Short Courses	<ul style="list-style-type: none"> <li>• Increased revenue from short courses</li> </ul>	<ul style="list-style-type: none"> <li>• Develop on-line short-courses to increase wide reach both locally and internationally.</li> </ul>
6)	Water Bottling Facility	<ul style="list-style-type: none"> <li>• Increase the revenue stream</li> <li>• Enhance institutional branding.</li> </ul>	<ul style="list-style-type: none"> <li>• Establish a Water Bottling Facility</li> </ul>
7)	Kenya Universities and Colleges Central Placement Service (KUCCPS)	<ul style="list-style-type: none"> <li>• Increase in student numbers in the programmes</li> </ul>	<ul style="list-style-type: none"> <li>• Diversification in mode of recruiting students and learning in the programmes</li> </ul>
8)	Goodwill from development partners	<ul style="list-style-type: none"> <li>• Increased funding for programmes/projects</li> </ul>	<ul style="list-style-type: none"> <li>• Request for funds from development partners</li> </ul>
9)	Water and sanitation as a human right	<ul style="list-style-type: none"> <li>• Progressive human capacity building</li> </ul>	<ul style="list-style-type: none"> <li>• Review of training and research programmes</li> </ul>
10)	Increased population and economic growth	<ul style="list-style-type: none"> <li>• Increased demand for water</li> <li>• Increased demand for workforce</li> <li>• Increased water resource pollution</li> </ul>	<ul style="list-style-type: none"> <li>• Expand KEWI products and services</li> </ul>
11)	Expanded use of ICT and broadband network in the country	<ul style="list-style-type: none"> <li>• e-Learning opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• Develop and implement e-Learning programmes</li> </ul>
12)	Devolved system of government	<ul style="list-style-type: none"> <li>• Sector Institutions that will require capacity building</li> </ul>	<ul style="list-style-type: none"> <li>• Develop engagement mechanism with CoG</li> <li>• Develop programmes targeting the counties</li> </ul>
<b>Threats</b>			
	<b>Threat</b>	<b>Strategic Implication</b>	<b>Strategic Response</b>
1)	New entrants offering substitute products/ services	<ul style="list-style-type: none"> <li>• Reduced demand for KEWI products</li> <li>• Loss of business</li> </ul>	<ul style="list-style-type: none"> <li>• Enhance research, development and technology transfer</li> <li>• Aggressive marketing for KEWI products</li> </ul>
2)	Competition from other institutional water bodies	<ul style="list-style-type: none"> <li>• Reduced resource mobilization</li> </ul>	<ul style="list-style-type: none"> <li>• Stakeholders forums for their understanding of KEWI Act</li> </ul>

3)	Changes in government funding priorities	<ul style="list-style-type: none"> <li>• Reduced exchequer funding</li> </ul>	<ul style="list-style-type: none"> <li>• Explore alternative sources of Funding</li> </ul>
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## 2.2.2 Political, Economic, Social, Technological, Environmental and Legal (PESTEL) Analysis.

PESTEL analysis was undertaken in order to describe and appreciate the environment under which KEWI operates. Such analysis allowed the Institute to find the best match between environmental trends and internal capabilities.

Outlined herein are some highlights of the PESTEL issues considered important for this Strategic Plan. PESTEL is summarized in the Table 2.2.4 provided below:

**Table 2.2.4: Political, Economic, Social, Technological, Environmental and Legal Analysis**

Category	Issue(s)	Description
Political	<ul style="list-style-type: none"> <li>• Appointment of the Chair of Governing Council</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of a leader to lobby for more funds and acceptability of KEWI programmes</li> <li>• Lack of a leader to provide policy direction</li> </ul>
	<ul style="list-style-type: none"> <li>• Changes in government policies</li> </ul>	<ul style="list-style-type: none"> <li>• Changes in funding priorities</li> </ul>
	<ul style="list-style-type: none"> <li>• Political influence/ goodwill</li> </ul>	<ul style="list-style-type: none"> <li>• Influence effective delivery of public projects and programmes</li> </ul>
Economic	<ul style="list-style-type: none"> <li>• Inadequate and inconsistent funding for the water sector human capacity building</li> </ul>	<ul style="list-style-type: none"> <li>• Low allocation of funds for training and research</li> <li>• Diminished funding from the exchequer</li> </ul>
	<ul style="list-style-type: none"> <li>• Non- Revenue Water in WSPs</li> </ul>	<ul style="list-style-type: none"> <li>• Loss of revenue for water supply companies WSPs and general water service providers</li> <li>• Unaccounted for water</li> </ul>
	<ul style="list-style-type: none"> <li>• Poor performance of the economy</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced incomes of the population and hence a reduction in funds raised from students fees</li> </ul>
	<ul style="list-style-type: none"> <li>• Inflation</li> </ul>	<ul style="list-style-type: none"> <li>• Inflation may affect KEWI through increased cost of goods and services hence impacting on services KEWI may offer</li> </ul>
Social	<ul style="list-style-type: none"> <li>• Attitude towards engineering oriented training programmes</li> </ul>	<ul style="list-style-type: none"> <li>• Perception held that science courses are difficult may lead to low level of applications and enrolment for engineering courses</li> </ul>
	<ul style="list-style-type: none"> <li>• Increased urbanization</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in urbanization that is not commensurate with improvement in water and sanitation facilities</li> </ul>
	<ul style="list-style-type: none"> <li>• High poverty levels</li> </ul>	<ul style="list-style-type: none"> <li>• High poverty levels is associated with low incomes hence reduced</li> </ul>

		enrolments
	<ul style="list-style-type: none"> <li>High population growth rate</li> </ul>	<ul style="list-style-type: none"> <li>There is pressure on the demand for water and waste water experts technicians/operators</li> </ul>
Technological	<ul style="list-style-type: none"> <li>Rapid technological advancement</li> </ul>	<ul style="list-style-type: none"> <li>Result in obsolescence of equipment</li> <li>Difficulty in adapting due to increased costs</li> <li>Inadequate resources to catch up with technological advancement</li> </ul>
Environmental/ Ecological	<ul style="list-style-type: none"> <li>Pollution of water sources</li> </ul>	<ul style="list-style-type: none"> <li>Compromised water quality</li> </ul>
	<ul style="list-style-type: none"> <li>Deforestation and catchment degradation</li> </ul>	<ul style="list-style-type: none"> <li>Destruction of forests and water sources affect quality and quantity of water</li> </ul>
	<ul style="list-style-type: none"> <li>Climate change</li> </ul>	<ul style="list-style-type: none"> <li>Decrease in water resources</li> <li>Conflicts in water use due to competition for the available water resources</li> <li>Increased floods</li> <li>Increased droughts</li> </ul>
Legal	<ul style="list-style-type: none"> <li>Article 43 of the Constitution of Kenya on economic and social rights</li> </ul>	<ul style="list-style-type: none"> <li>Water is considered a human right hence need for the government to provide water</li> </ul>
	<ul style="list-style-type: none"> <li>Kenya Water Institute Act 2001</li> </ul>	<ul style="list-style-type: none"> <li>Gaps in the Act that need to be filled to strengthen KEWI's mandate</li> </ul>
	<ul style="list-style-type: none"> <li>Water and sanitation services devolved under the Constitution creating new institutions</li> </ul>	<ul style="list-style-type: none"> <li>Modalities of working with the county governments</li> </ul>

### 2.2.3 Stakeholders Analysis

A stakeholder is any person, group or institution that has an interest in a given activity or institution. In this regard, KEWI has maintained a culture of continued interaction and working in partnership and collaborations with its stakeholders in the execution of its mandate. Each of these stakeholders has certain expectations which they hope will be fulfilled through their association with the Institution. KEWI also recognizes the fact that stakeholders' interests and clear expectations influence the Institute's function, and hence the need to build good working relationships.

The matrix is composed of Name of stakeholder, Stakeholder expectation from organization, organization expectation from the stakeholder. The following is a summary of KEWI stakeholders' analysis represented in Table 2.2.3

**Table 2.2.3: Stakeholders' Analysis Chart**

	Stakeholder	Stakeholder expectations	KEWI expectations from the stakeholder
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1.	Ministry of Water & Sanitation and Irrigation	<ul style="list-style-type: none"> <li>• Training of competent staff to deliver on the Ministry's mandate</li> <li>• Efficient, effective and timely delivery of services</li> <li>• Seek for partnerships</li> <li>• Improved innovation research and development</li> <li>• Efficient utilization of funds</li> <li>• Timely submission of reports</li> </ul>	<ul style="list-style-type: none"> <li>• Timely disbursement of finances</li> <li>• Support KEWI's functions</li> <li>• Effective linkage with the National Government</li> <li>• Effective linkage with the National Treasury</li> <li>• Effective linkage with the development partners</li> <li>• Training scholarships for KEWI staff</li> <li>• Policy formulation</li> </ul>
2.	County Governments	<ul style="list-style-type: none"> <li>• Qualified personnel for water and sanitation utilities</li> <li>• Capacity building and training for county staff</li> <li>• Provision of water solutions</li> <li>• Partnership in implementation of devolved functions in water and sanitation</li> </ul>	<ul style="list-style-type: none"> <li>• Sponsorship of county staff to train in KEWI</li> <li>• County governments to prioritize water training in their plans</li> <li>• Collaboration</li> <li>• Feedback on performance of KEWI students and graduates</li> <li>• Provision of Land for establishment/expansion of campuses</li> </ul>
3.	Water Sector Institutions	<ul style="list-style-type: none"> <li>• Capacity building</li> <li>• Collaboration</li> <li>• Joint consultancy and advisory services</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration</li> <li>• Research needs</li> <li>• Training needs</li> <li>• Funding of KEWI research projects</li> </ul>
4.	Development Partners	<ul style="list-style-type: none"> <li>• Accountability and efficient utilization of donations and grants</li> <li>• Achievement of planned outputs and outcomes of the funded projects</li> <li>• Involvement of stakeholder consultations in planning for the sector</li> </ul>	<ul style="list-style-type: none"> <li>• Timely disbursement of funds</li> <li>• Technical support including staff and institutional capacity development</li> <li>• Capacity Building</li> </ul>
5.	Governing Council	<ul style="list-style-type: none"> <li>• Good governance and leadership at all levels</li> <li>• Implementation of quality, affordable, demand driven and competitive programs</li> <li>• Compliance to financial and procurement policies and procedures</li> <li>• Management to implement council</li> </ul>	<ul style="list-style-type: none"> <li>• Support in timely policy formulation, guidance</li> <li>• Support and approval</li> <li>• Focused leadership</li> <li>• Enhanced local and international lobbying and networking</li> </ul>

		resolutions and corporate policies	
6.	Staff	<ul style="list-style-type: none"> <li>• Sustainability of the Institute</li> <li>• Defined career progression</li> <li>• Healthy, safe and secure environment</li> <li>• Training and development opportunities</li> <li>• Efficient and effective Human Resources services</li> </ul>	<ul style="list-style-type: none"> <li>• Quality service</li> <li>• Provision of necessary skills and manpower</li> <li>• Improved productivity</li> <li>• Adherence to policies, rules and regulations of KEWI</li> <li>• Efficient utilization of resources allocated</li> </ul>
7.	Students	<ul style="list-style-type: none"> <li>• Quality and affordable programs</li> <li>• Conformance of programs to relevant professional regulatory bodies</li> <li>• Healthy, safe and secure environment</li> <li>• Defined program schedules</li> <li>• Funding or scholarship opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• Discipline</li> <li>• Compliance with the institute rules and regulations</li> <li>• Academic excellence</li> <li>• Be KEWI ambassadors</li> <li>• Graduate competent technicians to fill the market demands</li> </ul>
8.	Public/ Citizenry	<ul style="list-style-type: none"> <li>• Enhanced awareness in the sector</li> <li>• Efficient and effective services</li> <li>• Transparency and accountability in service delivery</li> <li>• Active participation in water sector</li> <li>• Employment opportunities in KEWI</li> <li>• KEWI participation in corporate social responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Responsible citizenry</li> <li>• Collaboration</li> <li>• Seek consultancy services</li> <li>• Regular feedback on services</li> <li>• Enrol in KEWI training programs</li> </ul>
9.	Professional bodies	<ul style="list-style-type: none"> <li>• Compliance by technical staff through registration and renewal of membership</li> <li>• Partner in implementation of development projects</li> </ul>	<ul style="list-style-type: none"> <li>• Improved standards of technical expertise and professional management in the sector</li> <li>• Improved innovations, research, development and policy analysis</li> <li>• Provide opportunities for continuous professional development</li> </ul>

10.	Regulatory bodies	<ul style="list-style-type: none"> <li>• Enlist for their services</li> <li>• compliance</li> </ul>	<ul style="list-style-type: none"> <li>• Registration and Accreditation to engage in scientific research</li> </ul>
11.	Private sector	<ul style="list-style-type: none"> <li>• Produce competent graduates for the industry</li> <li>• Joint research for sustainable solutions for the industry</li> <li>• Increased involvement in PPPs for water, irrigation and sanitation services provision</li> </ul>	<ul style="list-style-type: none"> <li>• Attachment and internship opportunities</li> <li>• Employment for KEWI graduates</li> <li>• Consultancy</li> <li>• Resource mobilization, Funding for capacity building and research</li> <li>• Scholarships</li> <li>• Corporate social responsibility</li> </ul>
12.	Parliament	<ul style="list-style-type: none"> <li>• Comply with set regulations</li> <li>• Timely submission of budget estimates</li> </ul>	<ul style="list-style-type: none"> <li>• Approve budget</li> <li>• Support in the review of Kenya Water Institute Act 2001</li> </ul>
13.	Research and Academic institutions	<ul style="list-style-type: none"> <li>• Collaborative research</li> <li>• Information exchange</li> <li>• Shared facility</li> <li>• Capacity building</li> <li>• Attachment and internship opportunities for students</li> <li>• Employment for graduates</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborative research</li> <li>• Information exchange</li> <li>• Shared facility</li> <li>• Capacity building</li> <li>• Opportunities for higher learning for KEWI graduates</li> </ul>
14.	Non – Governmental Organizations and Community Based Organizations involved in WASH activities	<ul style="list-style-type: none"> <li>• Collaboration in community outreach activities</li> <li>• Competent graduates</li> <li>• Sustainable community involvement and empowerment</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration in community outreach activities</li> <li>• Attachment and internship opportunities for students</li> <li>• Employment for KEWI graduates</li> <li>• Community mobilization</li> </ul>
15.	Suppliers, Contractors and Consultants	<ul style="list-style-type: none"> <li>• Fair bidding process</li> <li>• Timely payments</li> <li>• Fair, transparent and accountable procurement process</li> <li>• Affirmative action on 30% access to KEWI procurement opportunities for Youth, women and persons with disabilities</li> </ul>	<ul style="list-style-type: none"> <li>• Timely delivery of quality goods and services</li> <li>• High standards of technical works undertaken, goods and services supplied to meet contractual obligations</li> <li>• Competitive and fair pricing</li> </ul>

## **CHAPTER THREE: STRATEGIC MODEL**

### **3.0 Overview**

This Chapter presents the strategic focus of the institute, which includes the vision, mission, motto, core values, key result areas, strategic objectives and strategies.

### **3.1 Vision Statement, Mission Statement and Core Values;**

#### **VISION STATEMENT**

A Technical Centre of Excellence in Training, Research, Innovation and Consultancy in the Water, Sanitation and Irrigation Sector

#### **MISSION STATEMENT**

To offer Competency-Based Training, Research, Innovation, Consultancy and Outreach Services in the Water, Sanitation and Irrigation Sector for sustainable development

#### **CORE VALUES**

Good Corporate Governance  
Professionalism  
Customer focus  
Innovativeness  
Inclusivity  
Patriotism  
Integrity

#### **MOTTO**

Fountain of Water Knowledge

### 3.2 Key Result Areas/Strategic Focus Areas (KRAs/SFAs)

In line with KEWI's Vision and Mission, five key result areas which reflect KEWI's mandate and responsibilities in the realization of Kenya Vision 2030 have been identified and will be the pillars of this Strategic Plan.

The Key Result Areas are:

#### **KRA 1: Training and Human Resources Development**

Training and human resource development will be attained through upgrade of equipment in 3 laboratories, 10 workshops and establishment of 4 demonstration sites. In addition there will be access to 10,000 students to e-learning and establishment of specialised and referenced physical and digital library (e-resources). Implementation of concepts, proposals, contract agreements and MOU's will be presented and signed by various development partners in human capacity building.

#### **KRA 2: Research, Innovation and Community Outreach**

Research and innovation and community outreach will be increased through development of 5 innovations and establishment of a knowledge management system for knowledge sharing. This will allow academic staff and student to publish their findings (innovations, creativity, invention, technology transfer) but also develop a repository.

#### **KRA 3: Resource Mobilization and Consultancy Services**

During this period, the Institute will mobilise Kshs 36 billion to support programmes and projects. This will be done through lobbying for funding by the National Treasury, development partners, student fees and enhancing a consultancy service by creating a strategic business unit.

#### **KRA 4: Institutional Capacity**

Institutional capacity will be enhanced through recruitment of 80% of the approved establishment, undertaking of human resources development, having a succession management plan and reviewing of terms and condition of service. In addition the institute will develop new infrastructure by increasing the number of campuses from 4 to 8 and strengthening ICT for training, research and communication.

#### **KRA 5: Leadership and Integrity (Governance)**

Leadership and integrity will be based on existing organizational culture and the institute will implement policies aimed to create and maintain key ethical standards, such as acting with integrity by being honest, open, accountable, objective and courageous.

### 3.3 Strategic Objectives and Strategies

Strategic Objectives and Strategies is an elaboration of the organization's Key Result Areas/Strategic Focus Areas. Strategic objectives are what the organization commits itself to accomplish in the long term while the strategies are the means, the ways, the how's and the methods by which agencies accomplish their objectives. Each Key Result Area/Strategic Focus Area should have at least one strategic objective and the accompanying strategies.

In order to address the key result areas identified in 3.1 above, the following strategies were formulated in line with the strategic objectives outlined in Table 3.3 below



**Table 3.3: Strategy Matrix**

<b>S/ NO</b>	<b>Key Result Areas/ Strategic Focus Areas</b>	<b>Strategic Objective</b>	<b>Strategies</b>
1.	Training and human resource development	To improve access, quality and relevance of training programmes and increase enrolment from 1585 to 10,000 by 2025.	<ul style="list-style-type: none"> <li>i. Establish Assessment and Certification Centres for Water, Sanitation and Irrigation TVET practitioners by 2025 through legislative and governance changes</li> <li>ii. Undertake curricular review for regular academic programmes in line with Competency Based Education and Training (CBET) guidelines</li> <li>iii. Develop 15 new curricular in line with CBET guidelines</li> <li>iv. Implement developed curricular in line with CBET guidelines</li> <li>v. Develop 30 Short-Course programs for the Water, Sanitation and Irrigation Sector based on the sector needs.</li> <li>vi. Implement 30 Short-Course programs for the Water , Sanitation and Irrigation Sector based on the sector needs</li> <li>vii. Hold quarterly Colloquiums/ Symposiums in the Water, Sanitation and Irrigation Sector</li> <li>viii. Develop E-modules to support e-learning</li> <li>ix. Upgrade E-Learning platform and enrol 10,000 students</li> <li>x. Establish a National Water, Sanitation and Irrigation Reference Library (physical and digital Library (e-resources)</li> <li>xi. Create linkages, partnerships and collaborations for students' attachments &amp; skills enhancement</li> <li>xii. Implement concepts, proposals, contract agreements and MOUs presented and signed by various development partners in human capacity building</li> <li>xiii. Establish a revolving fund managed by HELB and KEWI to reach 30% of the student population</li> </ul>

			iv. Establish scholarships to 20 needy and bright students as Corporate Social Responsibility (CSR).
2.	Research, Innovation and Community Outreach	To increase research outputs through 50 publications, 2 patents , 5 innovations and 47 outreach by 2025	<ul style="list-style-type: none"> <li>i. Establish Water, Sanitation and Irrigation Sector Training and Research Fund by 2025 through Legislative and Governance changes</li> <li>ii. Review and implement KEWI research Policy</li> <li>iii. Establish Innovation and Incubation Centres</li> <li>iv. Capacity build academic staff on grant proposal writing</li> <li>v. Modernize Research Laboratory</li> <li>vi. Establish field stations in each water basin</li> <li>vii. Undertake Research Needs Assessment in collaboration with stakeholders in the Water, Sanitation and Irrigation Sector</li> <li>viii. Establish linkages with the industry to create opportunities for Research, Development and Innovation</li> <li>ix. Hold water, irrigation and sanitation conferences, symposium, seminars, workshops to disseminate research findings</li> <li>x. Establish KEWI annual water, sanitation and Irrigation research journal</li> <li>xi. Implement continuous professional development programmes for academic staff (lecturers and researchers)</li> <li>xii. Develop 5 innovations that have clear outcomes by 2025</li> <li>xiii. Undertake 50 publications that inform policy by 2025</li> <li>xiv. Develop a water, sanitation and irrigation geo-portal (platform)</li> <li>xv. Conduct outreach programs to promote Water Education in 47 counties</li> <li>xvi. Establish knowledge management system for knowledge sharing</li> </ul>
3.	Resource mobilization &	To enhance KEWI financing by mobilizing Kshs.	i. Increase revenue from Ksh. 2billion to Ksh. 6billion by 2025

	consultancy services	38.14 Billion to support programmes and projects by 2025	<ul style="list-style-type: none"> <li>ii. Develop Investment Portfolio to attract funds (50M) from lending agencies</li> <li>iii. KEWI Infrastructural Modernization for the realization of Governments Vision 2030 and Big Four Agenda</li> <li>iv. Create Public Private Partnerships to generate Ksh 100million by 2025</li> <li>v. Enhance consultancy services by creating a strategic business unit to generate ksh 300million by 2025</li> </ul>
4.	Institutional capacity	<ul style="list-style-type: none"> <li>i. To increase KEWI staff establishment from the current 22% of the approved establishment to 80% and enhance their skills and competencies.</li> </ul>	<ul style="list-style-type: none"> <li>i. Recruit 80% of the approved establishment</li> <li>ii. Develop adequate numbers of effectively trained human resource to implement curriculum and conduct research, consultancy</li> <li>iii. Induction training for staff</li> <li>iv. Implementation of new organisation structure and operational arrangements as per Human Resource Instruments, 2018.</li> <li>v. Review Human Resource Instruments, 2018</li> <li>vi. Assignment of roles and redeployment of existing staff (job matching), as per Human Resource Taskforce Report, 2021</li> <li>vii. Recruit key personnel to vacant positions in the new organisation structure, as per Human Resource Taskforce Report, 2021</li> <li>viii. Implement a succession management plan</li> <li>ix. Implement work environment survey reports</li> </ul>
		<ul style="list-style-type: none"> <li>ii. To expand KEWI physical infrastructure in all Campuses (movable and immovable assets) capacity to provide for an additional 8415 students moving from the current 1585 10,000 by 2025</li> </ul>	<ul style="list-style-type: none"> <li>i. KEWI Infrastructural Modernization for the realization of Governments Vision 2030 and Big Four Agenda</li> <li>ii. Undertake a viability assessment of KEWI campuses in view of KEWI Mandate</li> <li>iii. Equip facilities in line with current international practices</li> <li>iv. Undertake feasibility study for proposed KEWI Campuses</li> <li>v. Establish new campuses from 4 in 2021 to 8 by 2025</li> </ul>

			<ul style="list-style-type: none"> <li>vi. Establish a robust ICT Infrastructure (hardware and software) to support E-learning, research, communication and Enterprise Resource Planner</li> <li>vii. Implement Technical Centre of Excellence strategy and plan</li> </ul>
5.	<b>Leadership and Integrity (Governance)</b>	To strengthen internal corporate governance systems	<ul style="list-style-type: none"> <li>i. Ensure compliance with relevant laws, regulations, national values and principles of good governance</li> <li>ii. Review The Kenya Water Institute Act ,No. 11 of 2001</li> <li>iii. Develop and review policies, regulations and guidelines for various functions of the institute</li> <li>iv. Implement the recommendations on the changes to the governance arrangements as per “Organizational Study and Capacity Needs Assessment Report for Kenya Water Institute, 2021”</li> </ul>

## CHAPTER FOUR: IMPLEMENTATION AND COORDINATION FRAMEWORK

### 4.0 Overview

Given the dynamism of the environment, KEWI needs to enhance its Institutional Capacity to keep pace with demands of the market. For KEWI to play its role effectively in national development, and to be able to implement this Strategic Plan, it has to strengthen its human resource capacity, financial and infrastructural resources

### 4.1 Structure of the Organization

An appropriate organizational structure has been developed to enhance management and reporting linkages and to facilitate information and communication flow, all of which are crucial for effective implementation of this Plan.

#### 4.1.1 Divisions/ Departments/ Directorates

The Management of KEWI is vested in the Council who provides policy and oversight while the day to day operations are delegated to the Secretary/CEO.

KEWI is organized in three (3) Divisions and three (3) stand-alone Departments namely as indicated below;

**i. Academic Affairs Division;**

The division is responsible for conducting training as per Kenya water Institute Act No. 11 of 2001 section 4(I) (b) and also conduct examinations, and award certificates as per the same Act. Section 4(I) (d) and (e).

**ii. Research, Consultancy & Technical Services Division;**

The Research, Consultancy and Technical Services Division is to provide leadership and coordination in the development and implementation of the Institute's research, consultancy, Monitoring & Evaluation systems and frameworks, risk management guidelines, technical and advisory services, resource mobilization and marketing policies, strategies and programs.

**iii. Corporate Services Division;**

The Corporate Services Division is responsible for providing leadership and coordination of Finance and Accounts, Human Resource Management and Development, Administration, Information and Communications Technology and Corporate Communications Departments.

**iv. Corporation Secretary and Legal Services Department;**

This Department will be responsible for coordinating the agenda and taking minutes of Governing Council meetings and providing legal guidance to the institute

**v. Supply Chain Management Department;**

The Section will be responsible for the procurement of goods and services, inventory management and disposal of assets of the Institute as guided by Public Procurement and Asset Disposal act 2015

**vi. Internal Audit Department**

The Internal Audit and Risk Assurance Department is responsible for providing assurance on the Councils internal control system, Risk Management framework and governance structure.

#### 4.1 .1 Current Organizational structure



#### 4.1 Staff Establishment

Currently, the Institute has 68 members of staff spread across the various functional areas and Campuses. The Institute has a team of highly skilled and experienced human capital.

The current staffing levels are insufficient to successfully implement the strategic plan and therefore, the achievement of the plan will in part be pegged on increasing the current staffing levels. Consequently, it is important to establish and maintain an optimal staffing level. To meet the human resource gaps and attain appropriate staffing levels, KEWI will proactively seek to attract, develop and retain the highest quality of human resource at all levels.

**Table 4.1: Staff Establishment (In a table: Cadre, establishment, in-post, variance)**

<b>S/No</b>	<b>Department</b>	<b>Authorized Establishment</b>	<b>In-post</b>	<b>Variance</b>
1.	Office of the Director/CEO	4	2	-2
2.	Corporation and Legal Services Department	2	0	-2
3.	Office of the Deputy Director Academic Affairs	2	1	-1
4.	Students Registration Services Department	12	0	-12
5.	Library Information Services Department	7	3	-4

6.	Water and Waste Water Engineering Department	55	9	-46
7.	Water Resources and Environmental Management Department	50	16	-34
8.	Management and Information Technology Department	16	3	-13
9.	Principals Campuses (Chiakariga, Kitui, Kisumu)	3	0	-3
10.	Deputy Director Research, Consultancy & Technical Services Division	2	1	-1
11.	Research, Strategy and Performance Management Department	4	2	-2
12.	Risk Management, Compliance and Quality Management Department	3	0	-3
13.	Planning, Resource Mobilization and Business Development Department	3	0	-3
14.	Consultancy and Technical services Department	10	1	-9
15.	Short Courses and Curriculum Development Department	2	0	-2
16.	Deputy Director Corporate Services	2	0	-2
17.	Finance and Accounts Department	13	5	-8
18.	Human Resource Management and Administration Department	62	14	-48
19.	Information communication Technology Department	6	1	-5
20.	Corporate Communications Department	2	1	-1
21.	Hospitality and Catering Section	41	7	-34
22.	Internal Audit and Risk Assurance Department	3	0	-3
23.	Supply Chain Management Section	11	2	-9
	<b>TOTAL</b>	<b>314</b>	<b>68</b>	<b>-246</b>

#### 4.2.2 Human Resource Development Strategies

Kenya water Institute will put in place human resource strategy to develop its staff so as to effectively deliver on its mandate. This will require the following;

1. Recruiting 80% of the approved establishment
2. Developing adequate numbers of effectively trained human resource to implement curriculum and conduct research, consultancy
3. Induction training for staff
4. Implementation of new organisation structure and operational arrangements as per Human Resource Instruments, 2018

5. Review Human Resource Instruments, 2018
6. Implementation of Human Resource Taskforce Report, 2021
7. Implementation of Technical Centre of Excellence strategy and plan
8. Implementation of succession management plan
9. Implementation of work environment survey reports

#### 4.3 Financial Resources

##### 4.3.1 Financial Resources Requirements

Financial Resources Requirements by Key Result Areas per Financial Year and total for plan period are provided in Table below;

**Table 4.3.1: Summary of Resource Requirements for the Period 2021-2025**

KEY RESULT AREA	RESULT	RESOURCE REQUIREMENTS						
		BASELINE ESTIMATE S (KSHS. MN)	PROJECTED ESTIMATES (KSHS. MN)					TOTAL
			Y1	Y2	Y3	Y4	Y5	
<b>KRA 1</b>	54	124.9	110.95	120	137.45	116.1	609.4	
<b>KRA 2</b>	88.1	144	115	161	110	136	666	
<b>KRA 3</b>	1197.2	9540	9840	10590	4090	4090	38150	
<b>KRA 4a</b>	598.9	300.8	466.5	569.5	619.5	719.5	2675.8	
<b>KRA 4b</b>	400	8925	9125	9700	3190	3100	34040	
<b>KRA 5</b>	17.85	26.7	13.7	7.7	4.7	7.7	60.5	
<b>TOTAL</b>	<b>1158.85</b>	<b>9521.4</b>	<b>9831.5</b>	<b>10558.2</b>	<b>4061.65</b>	<b>4079.3</b>	<b>38051.73</b>	

##### 4.3.2 Resource Gaps

**Table 4.3.2: Summary of Resource Gaps**

Expenditure	Requirement Estimates (Ksh. Mn) ( As per current 3-year MTEF period)			Allocation (Ksh.Mn)	Variance (Ksh.Mn)
	Year1	Year 2	Year3		
<b>Recurrent</b>	623	657	710	1990	(680)
<b>Development</b>	8800	9000	9500	27300	-
<b>Total</b>	<b>9423</b>	<b>9657</b>	<b>10210</b>	<b>29290</b>	<b>(680)</b>

##### 4.3.3 Resource Mobilization Strategies

Kenya water Institute will put in place the following Resource Mobilization Strategies so as to effectively deliver on its mandate

- i. Increase revenue from Ksh. 2billion to Ksh. 6billion by 2025
- ii. Develop Investment Portfolio to attract funds (50M) from lending agencies
- iii. KEWI Infrastructural Modernization for the realization of Governments Vision 2030 and Big Four Agenda
- iv. Create Public Private Partnerships to generate Ksh 100million by 2025



- v. Enhance consultancy services by creating a strategic business unit to generate ksh 300million by 2025

#### 4.4 Risk Analysis and Mitigation Measures

A description of risks and their categorization (High, Medium or Low), giving planned actions for mitigation, monitoring and reporting of those risks has been summarised in Table below.

**Table 4.42: Risk Analysis and Mitigation Measures**

No.	Area	Anticipated Risk	Category/level	Mitigation Measure
	Admissions	Inadequate student numbers Slow admission process Unpopular programmes	High	<ul style="list-style-type: none"> <li>Enhance marketing initiatives</li> <li>Strengthen and Streamline the admission processes to ensure efficiency and Effectiveness</li> <li>Develop and implement market driven Programmes</li> </ul>
	Examinations	Non credible Examination	High	<ul style="list-style-type: none"> <li>Streamline examination processing to full proof the system</li> <li>Strengthen supervision of the examination process</li> <li>CCTV cameras in all examinations room.</li> </ul>
		Delays in release of results	High	<ul style="list-style-type: none"> <li>Strengthen and Streamline results processing mechanism</li> </ul>
	Teaching	Offering of non-accredited Programmes	High	Ensure accreditation of all offered programmes.
		Poor quality Teaching	High	<ul style="list-style-type: none"> <li>Ensure Quality Assurance is maintained</li> <li>Carry out regular course evaluation and act on the recommendations to maintain the quality of teaching</li> </ul>
		Theory based training	High	<ul style="list-style-type: none"> <li>Include practicals in the timetable</li> <li>Equip workshops and laboratories</li> <li>Monitor training delivery modes</li> </ul>
	Research and innovation	Non adherence to Ethical Concerns	High	<ul style="list-style-type: none"> <li>Strengthen the Ethics and Review Committee.</li> </ul>
		Donor Fatigue	High	<ul style="list-style-type: none"> <li>Ensure high quality research proposals</li> </ul>
		Low quality Research Output	High	<ul style="list-style-type: none"> <li>Strengthen research culture.</li> <li>Publish in peer reviewed journals</li> </ul>
		Inadequate funds to carry out research	High	<ul style="list-style-type: none"> <li>Strengthen resource mobilisation strategies.</li> <li>Commercialise research outputs.</li> </ul>

				<ul style="list-style-type: none"> <li>Encourage Industry Linkage in Research activities.</li> </ul>
	Outreach	Low Technology outputs for transfer to Community	High	<ul style="list-style-type: none"> <li>Encourage high caliber Research activities</li> </ul>
		Inadequate funds to support community outreach activities	High	<ul style="list-style-type: none"> <li>Strengthen resource mobilisation strategies</li> </ul>
	Governance	Low publicity	High	<ul style="list-style-type: none"> <li>Effective engagement of the relevant stakeholders</li> </ul>
		Inadequate funds to support community outreach activities	High	<ul style="list-style-type: none"> <li>Regular audit of policy requirements.</li> <li>Development and implementation of all requisite policies as recommended by audits.</li> </ul>
		Lack of relevant legislations, regulations and guidelines	Medium	<ul style="list-style-type: none"> <li>Alignment of policies to new laws and regulations</li> <li>Undertake adequate sensitisation and education of all stakeholders on the new policies and regulations.</li> </ul>
		Low visibility of the institute	Medium	<ul style="list-style-type: none"> <li>Enhance Collaboration with stakeholders.</li> <li>Develop and implement a comprehensive communication strategy</li> </ul>
		Reputational risks	Medium	<ul style="list-style-type: none"> <li>Regularly determine customer requirements and expectations.</li> <li>Offer services that meet and exceed interested parties' expectations.</li> <li>Develop and implement a comprehensive communication strategy</li> </ul>
	Legal risks	High number of litigations	Medium	<ul style="list-style-type: none"> <li>Ensure compliance with legal requirements in governance and operations</li> <li>Compliance with Labour Laws</li> <li>Ensure compliance with all regulatory and statutory requirements</li> <li>Exhaust other dispute resolution mechanisms to avoid litigations</li> </ul>
		Non Compliance with Regulatory and Statutory Requirements	Medium	<ul style="list-style-type: none"> <li>Conduct regular legal Audits</li> <li>Implement audit recommendations</li> </ul>
	Technologica l/ ICT Risks	Inadequate ICT Infrastructure/ERP	High	<ul style="list-style-type: none"> <li>Review and implement an ICT strategy and policy.</li> <li>Strengthen the ICT Directorate.</li> <li>Resource mobilisation to Upgrade the infrastructure</li> </ul>
		Lack of data security.	High	<ul style="list-style-type: none"> <li>Develop and implement an ICT data security policy</li> </ul>

		Failure to implement information security management system	Medium	<ul style="list-style-type: none"> <li>Implement information security management System.</li> </ul>
		Use of unlicensed software	Medium	<ul style="list-style-type: none"> <li>Procure software licenses</li> <li>Update software regularly</li> <li>Capacity building of staff</li> </ul>
		Use of obsolete hardware	High	<ul style="list-style-type: none"> <li>Procure software licenses</li> <li>Undertake regular equipment upgrades</li> </ul>
		Resistance to new technology	Medium	<ul style="list-style-type: none"> <li>Undertake adequate sensitisation on acceptance of change</li> <li>Staff capacity building</li> <li>Adequate involvement of end-users</li> </ul>
		Rapid changes in technology that may lead to loss of competitive advantage	Medium	<ul style="list-style-type: none"> <li>Periodic appraisal of technological changes in the sector</li> <li>Research and continuous training and capacity building</li> </ul>
	Financial risks	Inadequate funding	High	<ul style="list-style-type: none"> <li>Lobby for more funds from Government</li> <li>Strengthen KEWI funding through diversification of revenue streams</li> <li>Ensure efficiency in resource utilization</li> </ul>
		Over-reliance on few sources of funding	High	<ul style="list-style-type: none"> <li>Diversify revenue streams</li> </ul>
		Inadequate Financial Management System	High	<ul style="list-style-type: none"> <li>Ensure full automation of financial systems</li> </ul>
		Huge Fee arrears (Bad Debts)	High	<ul style="list-style-type: none"> <li>Strengthen and Tighten fee collection mechanism</li> </ul>
		Fraud, misappropriation, Corruption and Abuse of Office	High	<ul style="list-style-type: none"> <li>Strengthen the internal audit function</li> <li>Take stern action against culprits</li> <li>Sensitisation and awareness creation</li> <li>Strengthen Corruption prevention strategies</li> <li>Ensure strict adherence to policies and regulations of the institute</li> </ul>
	Changing Technology	Rapid changes in technology that may lead to loss of competitive advantage	Medium	<ul style="list-style-type: none"> <li>Periodic appraisal of technological changes in the sector</li> <li>Research and continuous training and capacity building</li> </ul>
	Staff	High staff turnover leading to loss of competitive advantage	High	<ul style="list-style-type: none"> <li>Improve terms and conditions of service for employees</li> </ul>
		Jobs skills mismatch	High	<ul style="list-style-type: none"> <li>Undertake job analysis</li> <li>Recruit, deploy and redeploy staff to match skills and job</li> </ul>
		KEWI organizational culture	High	<ul style="list-style-type: none"> <li>Develop and implement corporate cohesion plans</li> </ul>

				<ul style="list-style-type: none"> <li>• Team building Sessions</li> <li>• Effective communication</li> </ul>
Strategy	Change of business environment which may have an impact on the strategic objectives	High	<ul style="list-style-type: none"> <li>• Regular /quarterly reviews of the business environment and its impact on the strategic plan targets</li> <li>• Regular review of strategic plan</li> </ul>	
	Lack of awareness of strategic plan targets which might lead to uncoordinated implementation of the plan	High	<ul style="list-style-type: none"> <li>• Sensitize staff on the strategic plan elements / targets</li> <li>• Embed the strategic plan targets in the staff performance contracts</li> </ul>	
	Change of government policies and priorities	High	Lobby for favorable policies	
Customers	The risk of loss of customers which might lead to loss of revenue	High	<ul style="list-style-type: none"> <li>• Review and enforce Customer Service Standards</li> <li>• Enhance Corporate Image</li> <li>• Enhance Communication with Customers</li> <li>• Comply with the Quality Management System as per the requirements of ISO</li> <li>• Provide market led products and services</li> </ul>	
KEWI's image	Loss of reputation	High	<ul style="list-style-type: none"> <li>• Compliance with GOK / independent commissions/ Regulatory bodies laws, regulations, policies and Guidelines</li> <li>• Effective communication</li> </ul>	
Assets	Destruction of physical properties due to fire, theft among other causes	Medium	Insure assets	
	Lack of ownership documents for some assets i.e. land in Kisumu, Nairobi and Chiakariga	Low	Legal acquisition of key assets	
Security	Loss or destruction of records, information, website and other documents	High	<ul style="list-style-type: none"> <li>• Enhance the information security management system</li> <li>• Enhance ICT security</li> </ul>	
	Staff and customer security	Medium	<ul style="list-style-type: none"> <li>• Enhance security system</li> <li>• Sensitize staff on disaster preparedness</li> </ul>	

## CHAPTER FIVE: MONITORING, EVALUATION AND REPORTING

### 5.0 Overview

The chapter covers monitoring, evaluation and review of the strategic plan. The purpose of the monitoring and evaluation is to guide the implementation of the plan by tracking activities, outputs and outcomes to find out whether targets are being achieved. In case the targets are not achieved, corrective actions are taken.

Due to the important role monitoring, evaluation and reporting plays in providing information for decision making the Institute developed a Monitoring and Evaluation Framework. However, for monitoring, evaluation and reporting to be undertaken, a budget should be in place of at least 1% of the budget allocated to the board.

### 5.0 Monitoring – institutional framework and frequency of monitoring and reporting

Monitoring – institutional framework and frequency of monitoring and reporting (e.g. Quarterly/Annually etc). The monitoring of the strategic plan will be continuous function that uses systematic data collection on specified indicators to give management and the main stakeholders on the on-going intervention indications on the extend of progress, achievement and progress in the use of allocated funds. The data collected will be analysed to prepare quarterly and annual reports. To facilitate this, each department will:

- i. Develop an annual work plan with appropriate targets, activities, outputs performance indicators and budgets as derived from this plan.
- ii. Progress for each action/activity will be measured against specific targets and schedules included in the plan.
- iii. Data capture formats or tools will be developed and used for data collection by implementing units
- iv. This is followed by analyzing and reporting of information to various users.
- v. The reporting will be done quarterly, half-yearly and yearly to management as well as to the GC
- vi. Results from the analysis will then be used to inform decision-making, help to identify difficulties and problem areas and to take immediate corrective action where deviations in implementation have been noted thereby ensuring that targets are achieved.

**NB:** A detailed Monitoring and Evaluation Framework is contained in Annex II

### 5.1 Evaluation – Mid-term and end-term evaluations and reporting

The Institute will carry out a midterm and end term evaluation which will be a systematic and objective assessment of the on-going or completed project, program or policy including its design, implementation and result. The objective will be to determine its relevance and fulfilment of objectives, development efficiency, effectiveness and sustainability. Evaluation will be institutionalised through the formation of a Monitoring and Evaluation committee. Mid-term and end term reports will be prepared to guide decision making. The reports that will be prepared will be disseminated to the various stakeholders.

### 5.2 Review of the Strategic Plan – Mid-term and end-term or when need arises

Mid-term and end-term review on the strategic plan will be undertaken to find out if targets are being met and in case the targets are not being met, corrective action will be undertaken.

#### Mid-term review

The purpose of the Mid-Term Review will be to assess the extent to which the Plan is meeting its implementation objectives and timelines and ensuring that it remains relevant and feasible. This will therefore provide an opportunity to give recommendations for the remaining phase of the Plan.

**End-term review**

The end term review of the strategic plan will be useful when preparing the next strategic plan. A report will be submitted highlighting the progress, and identifying the targets that were not met and reasons.

**Annexes**

**Annex I: Implementation Matrix**

<b>Key Result Area 1: Training and Human Resource Development</b>														
<b>Strategic Objective: To improve access, quality and relevance of training programmes and increase enrolment from 1585 to 10,000 by 2025.</b>														
<b>Expected Outcome: 1.Improved access, quality and relevance of training programmes</b>														
<b>2. Increased enrolment from 1585 to 10,000 by 2025.</b>														
Strategy	Expected Output	Output Indicators	Target for 5 years						Budget (Mn)					Responsibility
				Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5	
Establish Assessment and Certification Centres for Water, Sanitation and Irrigation TVET practitioners by 2025 through legislative and governance changes	Assessment and Certification Centres established.	No. of Assessment and Certification Centres established 1. Drilling Technology Centre 2. Plumbing and pipefitting Centre 3. Water engineering technology centre 4. Wastewater and sanitation engineering technology centre 5. Irrigation and drainage engineering Technology centre 6. Water Resources Management Technology centre	4	4	*	*	*	*	5	1	1	1	1	DDAA

		7. Water Laboratory Technology centre													
Undertake curricular review for regular academic programmes in line with Competency Based Education and Training (CBET) guidelines	Assessment and Certification Centre operationalized	No. of trainees assessed	3000	400	500	600	700	800	10.00	5.00	5.00	5.00	5.00	DDAA	
		No. of trainees certified	3000	400	500	600	700	800	0.20	0.25	0.30	0.35	0.40	DDAA	
	TVET practioners registered	No. of TVET Water, Sanitation and Irrigation practioners registered	3000	400	500	600	700	800	2	1	1	1	1	DDAA	
	Curricular reviewed /validated in line with CBET	No. of programmes accredited with TVET/CDAC C	8	5	3	*	*	*	15	2	2	2	2	DDRCTS	
	Develop 15 new curricular in line with CBET guidelines	Market surveys done	No. Market survey reports	5	1	1	1	1	1	1	1	1	1	1	DDRCTS
		Occupational standards developed.	No. Job analysis reports	15	4	4	4	3	*	4	4	4	3	*	DDRCTS
No. of job validation			15	4	4	4	3	*	3	3	3	1.5	*	DDRCTS	



		No. of task analysis reports	15	4	4	4	3	*	3	3	3	1.5	*	DDRCTS
		No. of occupational standards reports	15	4	4	4	3	*	5	4	4	3	*	DDRCTS
	Curricular developed	No. of curricular accredited by TVET/CDACC	15	4	4	4	3	*	12	4	4	3	*	DDRCTS
Implement developed curricular in line with CBET guidelines	Curricular implemented	No. of curricular in operation	15		4	8	12	15	*	20	20	20	20	DDAA
Develop 30 Short-Course programs for the Water , Sanitation and Irrigation Sector based on the sector needs.	Short courses developed	No. of short courses developed	30	8	8	8	6	*	2.4	2.4	2.4	2.4	1.8	DDRCTS

Implement 30 Short-Course programs for the Water , Sanitation and Irrigation Sector based on the sector needs	Short courses implemented	No. of short courses implemented	30	8	16	24	30	*	2.4	2.4	2.4	1.8	*	DDRCTS
Hold quarterly Colloquiums/ Symposiums in the Water, Sanitation and Irrigation Sector	Colloquiums or Symposiums held	No. of Colloquiums/ symposiums	20	4	4	4	4	4	1	1	1	15	1	DD/AA
Develop E-modules to support e-learning	E-modules developed	No. of e-modules	15	3	3	3	3	3	12	6	6	6	3	DD/AA
Upgrade E-Learning platform and enrol 10,000 students	E-Learning platform upgraded	Percentage of upgrade	100	60	70	80	90	100	6	5	5	5	5	DDAA
	10,000 students enrolled	No. of students enrolled	10,000	2000	4000	6000	8000	10000	20	25	35	45	55	DDAA
Establish a National Water, Sanitation and Irrigation Reference Library	National Water, Sanitation and Irrigation Reference Library established	No. of National Water, Sanitation and Irrigation Reference Library	1	1	*	*	*	*	2	2	2	2	2	DD/AA

(physical and digital Library (e-resources))		No. of Catalogue of e-resources	1000	50	200	500	700	1000	5	5	5	5	5	DDAA
Create linkages, partnerships and collaborations for students' attachments & skills enhancement	MOUs and Partnerships signed	No. of MOUs signed	20	4	4	4	4	4	1.2	1.2	1.2	1.2	1.2	D DD/AA
Implement concepts, proposals, contract agreements and MOUs presented and signed by various development partners in human capacity building	MOUs implemented	No. of MOUs	10	2	2	2	2	2	1.2	1.2	1.2	1.2	1.2	DD/AA
Establish a revolving fund managed by HELB and KEWI to reach 30% of the student population	Revolving fund established	Amount allocated	50	10	20	30	40	50	*	*	*	*	*	DD/AA
	Revolving fund operational zed	Percentage of students beneficiaries	30%	10	15	20	25	30	10	10	10	10	10	DD/AA

Establish scholarships to 20 needy and bright students as Corporate Social Responsibility (CSR).	Scholarship policy Approved	No. of Approved Scholarship policy	1	1	*	*	*	*	1	1	*	*	*	DDAA
	Students offered scholarships	No. of scholarships offered	20	4	4	4	4	4	0.5	0.5	0.5	0.5	0.5	DD/AA
Sub-Total									124.9	110.95	120	137.45	116.1	<b>609.4</b>

<b>Key Result Area 2: Research, Innovation and Community Outreach</b>														
<b>Strategic Objective: To increase research outputs through 50 publications, 2 patents , 5 innovations and 47 outreach in 47 counties by 2025</b>														
<b>Outcome: Increase research outputs through 50 publications, 2 patents , 5 innovations and 47 outreach in 47 Counties by 2025</b>														
Strategy	Expected Output	Output Indicators	Target for 5 years	Output Indicators					Budget (Mn)					Responsibility
				Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5	
Establish Water, Sanitation and Irrigation Sector Training and Research Fund by 2025 through Legislative and Governance changes	Water, Sanitation and Irrigation Sector Training and Research Fund established	No. of approved Training and Research Fund policy	1	1	*	*	*	*	10	*	*	*	*	DDRCS
Review and implement	KEWI Research Policy reviewed	No. of approved	1	1	*	*	*	*	1	1	1	1	1	DDRCS

KEWI research Policy		KEWI Research policy												
Establish Innovation and Incubation Centres	Innovation and Incubation Centres established	No. of Innovation and Incubation Centres	4	1	1	1	1	*	5	2	2	2		DDRCS
Capacity build academic staff on grant proposal writing	Staff Capacity built	No. of academic staff capacity built on grant proposal writing	100	20	40	60	80	100	5	5	5	5	5	DDCS
	Award winning grant proposals developed	No. of award winning grant proposals developed	45	3	6	9	12	15	6	6	9	12	15	DDRCTS
Modernize Research Laboratory	Renovate research laboratory	No. of research laboratory renovated	1	1	1	1	1	1	30	10	10	10	10	DDRCTS
	Equipping the lab with state of art equipment	No. of state of art equipment procured	10	2	2	2	2	2	40	30	80	20	20	DDRCTS
	ISO/IEC 17025:2017 accredited	No. of accreditation Certificate	1	1	1	1	1	1	5	5	5	5	10	DDRCTS
Establish field stations in each water basin	Research field stations established	No. of field stations established	5	1	1	1	1	1	5	5	5	5	20	DDRCTS

Undertake Research Needs Assessment in collaboration with stakeholders in the Water, Sanitation and Irrigation Sector	Research Needs Assessed	No. of Research Needs Assessment reports	5	1	1	1	1	1	5	5	5	5	5	DDRCTS
Establish linkages with the industry to create opportunities for Research, Development and Innovation	Partnership established	No. of partnerships established	10	2	2	2	2	2	3	3	3	3	3	DDRCTS
Hold water, irrigation and sanitation conferences, symposium, seminars, workshops to disseminate research findings	Conferences, symposium, seminars, workshops held	No. of conference, symposium, seminars reports	5	1	1	1	1	1	3	3	3	3	3	DDRCTS
Establish KEWI annual water, sanitation and Irrigation research journal	Research journals established	No. of Research journals	5	1	2	3	4	5	2	4	6	8	10	DDRCTS

Implement continuous professional development programmes for academic staff (lecturers and researchers)	Continuous professional development programme for academic staff implemented	No. of staff undertaking Continuous professional development programmes	100	10	15	20	25	30	4	5	6	8	10	DDCS
Develop 5 innovations that have clear outcomes by 2025	Innovations developed	No. of innovations developed	5	1	2	2	3	4	3	6	6	8	10	DDRCS
Undertake 50 publications by 2025	Publications Done	No. of Publications	50	10	10	10	10	10	3	4	4	4	3	DDRCS
Develop a water, sanitation and irrigation geo-portal (platform)	Geo-portal/ platform developed	No. of Geo-portal platforms	1	1	1	*	*	*	3	10	*	*	*	DDRCS
Conduct outreach programs to promote Water Education in 47 counties	Outreach programs conducted	No. of Outreach programs conducted	47	10	10	10	10	7	2	2	2	2	2	DDRCS
	Covid-19 intervention measures & Hygiene	No. of Covid-19 intervention measures & Hygiene	47	10	10	10	10	7	3	3	3	3	3	DDRCS
Establish knowledge management system for knowledge sharing	Knowledge management system established	No. of Knowledge management system reports	1	1	1	1	1	1	6	6	6	6	6	DDRCS

Sub-Total									144	115	161	110	136	666
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<b>Key Result Area 3: Resource Mobilization &amp; Consultancy Services</b>														
<b>Strategic Objective: To enhance KEWI financing by mobilizing Kshs. 38.14 Billion to support programmes and projects by 2025</b>														
<b>Expected Outcome: Kshs. 38.14 Billion mobilized to support programmes and projects by 2025</b>														
Strategy	Expected Output	Output Indicators	Target for 5 years						Budget (Mn)					Responsibility
				Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5	
Increase revenue from Ksh. 2billion to Ksh. 6billion by 2025	Ksh. 6 billion revenue raised	Amount in Ksh Raised	6b	650	750	1000	1600	2000	650	750	1000	1600	2000	DDCS/ DDRCTS/ DDAA
Develop Investment Portfolio to attract funds (50M) from lending agencies	Ksh 50 million raised from investment portfolio	Amount in Ksh raised from investment portfolio	50m	10	10	10	10	10	10	10	10	10	10	DDCS
KEWI Infrastructural Modernization for the realization of Governments Vision 2030 and Big Four Agenda	Ksh. 31.7 B mobilized for modernization of KEWI infrastructure	Amount in Ksh mobilized	31.7 B	8800	9000	9500	2400	2000	8800	9000	9500	2400	2000	DDCS



Create Public Private Partnerships to generate Ksh 100million by 2025	Ksh 100million generated through PPP	Amount in Ksh raised through PPP	100	20	20	20	20	20	20	20	20	20	20	DDCS/ DDRCTS/ DDAA
Enhance consultancy services by creating a strategic business unit to generate ksh 300million by 2025	Ksh 300million raised through consultancy services	Amount in Ksh raised	300	60	60	60	60	60	60	60	60	60	60	DDCS/ DDRCTS/ DDAA
Sub-Total									954	9840	105	4090	409	<b>38150</b>
									0		90		0	

<b>Key Result Area 4: Institutional Capacity</b>														
<b>Strategic Objective: To increase KEWI staff establishment from the current 22% of the approved establishment to 80% and enhance their skills and competencies</b>														
<b>Outcome: 1. Increased KEWI staff establishment from the current 22% of the approved establishment to 80%</b>														
<b>2. Enhance skills and competencies of KEWI staff</b>														
Strategy	Expected Output	Output Indicators	Target for 5 years						Budget (Mn)					Responsibility
				Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5	
Recruit 80% of the approved establishment.	80% of the approved establishment employed	Percentage of approved establishment	80	40	50	60	70	80	290	439	560	610	710	DDCS

Develop adequate numbers of effectively trained human resource to implement curriculum and conduct research, consultancy	KEWI human resource trained	Percentage of human resource trained	100	20	40	60	80	100	3	3	3	3	3	DDCS
Induction training for staff	Staff inducted	Percentage of staff inducted	100	20	40	60	80	100	3	3	3	3	3	DDCS
Implementation of new organisation structure and operational arrangements as per Human Resource Instruments, 2018.	Human Resource Instruments, 2018 implemented	Percentage of Human Resource Instruments, 2018 implemented	100	100	*	*	*	*	*	3.2	*	*	*	DDCS
Review Human Resource Instruments, 2018	Human Resource Instruments, 2018 reviewed	No. of human resource instruments, 2018 reviewed	1	*	1	*	*	*	*	13	*	*	*	DDCS
Assignment of roles and redeployment of existing staff (job matching), as per Human Resource Taskforce Report, 2021	Human Resource Taskforce Report, 2021 implemented	Percentage of Human Resource Taskforce Report, 2021 implemented	100	100	*	*	*	*	1.3	0.8	*	*	*	DDCS

Recruit key personnel to vacant positions in the new organisation structure, as per Human Resource Taskforce Report, 2021	Personnel recruited	No of Personnel recruited	184	92	111	129	147	184	3	3	3	3	3	DDCS
Implement a succession management plan	Succession management plan implemented	Percentage of succession management plan implemented	100	100	100	100	100	100	*	1	*	*	*	DDCS
Implement work environment survey reports	Work environment Survey reports implemented	No. of work environment survey reports done and implemented	5	1	1	1	1	1	0.5	0.5	0.5	0.5	0.5	DDCS
Sub-Total									300.8	466.5	569.5	619.5	719.5	<b>2675.8</b>

<b>Key Result Area 4: Institutional Capacity</b>														
<b>Strategic Objective: To expand KEWI physical infrastructure in all Campuses (movable and immovable assets) capacity to provide for an additional 8415 students moving from the current 1585 10,000 by 2025</b>														
<b>Outcome: Expanded physical infrastructure in all Campuses</b>														
Strategy	Expected Output	Output Indicators	Target for 5 years						Budget (Mn)					Responsibility
				Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5	
KEWI Infrastructural Modernization for the realization of Governments	Construction projects carried out 1. Tower constructed	Percentage completion	100	20	40	60	80	100	8800	9000	9500	2400	2000	D

Vision 2030 and Big Four Agenda	<p>in Nairobi Campus</p> <p>2. Laboratories, workshops, Library, Lecture halls, health centre in Kisumu Campus</p> <p>3. Laboratories, workshops, Library, Lecture halls, health centre in Chiakariga Campus</p> <p>4. Laboratories, workshops, Library, Lecture halls, health centre in Kitui Campus</p>													
Undertake a viability assessment of KEWI campuses in view of KEWI Mandate	Viability assessment undertaken	No. of viability assessment Reports	4	4	*	*	*	*	2	2	*	*	*	DDCS
Equip facilities in line with current international practices	Facilities equipped	Percentage of facilities equipped	100	20	40	60	80	100	50	50	60	20	80	DDCS
Undertake feasibility study for proposed KEWI Campuses	Feasibility study undertaken	No. of feasibility report	4	2	2	*	*	*	3	3	*	*	*	DDCS

Establish new campuses from 4 in 2021 to 8 by 2025	Four new campuses established 1. Muranga 2. Homabay 3. Samburu 4. Machakos	No. of Campuses established	4	*	*	1	1	2	*	*	70	750	1000	DDCS
Establish a robust ICT Infrastructure (hardware and software) to support E-learning, research, communication and Enterprise Resource Planner	1000 computers and relevant softwares bought and networked (200 Kisumu, 200 Kitui, 200 Chiakariga 400 Nairobi)	No. of hardware and software bought	1000	200	200	200	200	200	20	20	20	20	20	DDCS
Implement Technical Centre of Excellence strategy and plan	Technical Centre of excellence Strategy and plan implemented	Percentage of Strategy and plan Implementation	100	40	80	100	*	*	50	50	50	*	*	DDCS
Sub-Total									8925	9125	9700	3190	3100	<b>34040</b>

**Key Result Area 5: Leadership and Integrity (Governance)**

**Strategic Objective: To strengthen internal corporate governance systems**

**Outcome: Strengthened Internal Corporate Governance Systems**

Strategy	Expected Output	Output Indicators	Target for 5 years						Budget (Mn)					Responsibility
				Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5	
Ensure compliance with relevant laws, regulations, national values	100% compliance with relevant laws, regulations	Percentage of compliance with relevant laws, regulations	100	100	100	100	100	100	1	1	1	1	1	DDCS

and principles of good governance														
Review The Kenya Water Institute Act , No. 11 of 2001	KEWI ACT Reviewed	No. of KEWI Act reviewed	1	1	*	*	*	*	15	5	*	*	*	Director
Develop and review policies, regulations and guidelines for various functions of the institute	Human Resource instrument reviewed	No. of HR instruments reviewed	1	*	1	*	*	*	5	*	*	*	*	DDCS
	45 GC and staff trained on principles of good Governance	No. GC and staff trained on principles of good Governance	45	15	15	*	*	15	2	3	3	*	3	DDCS
Implement the recommendations on the changes to the governance arrangements as per “Organizational Study and Capacity Needs Assessment Report for	Legal officer recruited	No. of Legal Officer recruited	1	1	*	*	*	*	*	*	*	*	*	DDCS
	Interactive sessions between GC , Staff and students held	No. of Interactive sessions with GC and students, staff held	5	1	1	1	1	1	1	1	1	1	1	
	KEWI Strategic Plan cascaded	No. of workshops	5	1	1	1	1	1	1.5	1.5	1.5	1.5	1.5	

Kenya Water Institute, 2021”		held to cascade Strategic Plan and Performance Contracts												
	Staff involvement in work plans and budgeting process	No. of staff involved in work plans and budgeting process	30	30	30	30	30	30	1.2	1.2	1.2	1.2	1.2	
	Operational organizational structure implemented	Percentage implementation of the organization structure	100	100	*	*	*	*	*	*	*	*	*	
	Communication and change management plan developed	No. of communication and change management plan	1	*	1	*	*	*	*	1	*	*	*	
Sub-Total									26.7	13.7	7.7	4.7	7.7	<b>60.5</b>

## Annex II: Monitoring and Evaluation Framework

Key Result Area	Outcome	Key Performance Indicator	Baseline	Target	
				Mid-Term Period Target	End of Plan Period Target
KRA 1: Training and human resource development	Improved access, quality and relevance of training programmes and increase enrolment from 1585 to 10,000 by 2025	No. students enrolled	1585	5000	10,000
		% of satisfaction by students	X	100	100
		No. applicants per programme	1500	7500	12,500
KRA 2: Research, Innovation and Community Outreach	Increased research outputs	No. of publications	10	25	50
		No. of patents	0	1	2
		No. innovations	0	2	3
		No. of Outreach Counties	15	23	47
KRA 3: Resource mobilization & consultancy services	Kshs. 38.14 Billion mobilized to support programmes and projects by 2025	Amount in Ksh mobilized	2billion	Ksh 18.1billion mobilized.	Kshs. 38.14 Billion mobilized
KRA 4: Institutional Capacity	Increased KEWI staff establishment from the current 22% of the approved establishment to 80%	Percentage of establishment	22	55	80
	Expanded physical infrastructure in all campuses	No. of Campuses developed	4	6	8
KRA 5: Leadership and Integrity (Governance)	Strengthened Internal Corporate Governance Systems)	Degree of implementation of good corporate governance.	X	100	100