

Name of the Institution

Template

**Institutional Science, Technology, and Innovation (STI)
Strategy**

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1.0 Introduction

Give a brief background about the MDA and any other relevant information more so on STI.

E.g. Brief historical background of the MDA, legal framework establishing the MDA, mandate of the MDA, the institutional framework, type of the MDA (Research Institution, University, University College, Regulating agency, TVET institution, MDA involved in National Research Priorities Framework, MDA with a distinct research and technology development centre/unit etc)

2.0 MDA Situational Analysis, and Rationale

2.1 Situational Analysis

Undertake a situational analysis of STI in the MDA based on STI Strategic/Operational Priorities, vis-a-viz the current status of STI in the country using Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis.

E.g.

- *Strengths: Established Centers of Excellence, innovation hubs etc*
- *Weaknesses: Inadequate funding for Research and Development (R&D), fragmentation of R&D systems etc*
- *Opportunities: Key role of STI in achieving the SDGs, role of STI in mitigating effects of COVID-19 pandemic etc*
- *Threats: Health, social and economic crisis attributed to COVID-19 Pandemic etc*

2.2 Rationale of the Institutional STI Strategy

Clearly state the Rationale of the STI Strategy

3.0 STI Strategic Orientation

3.1 Vision of the MDA

3.2 Mission of the MDA

3.3 Core values of the MDA

3.4 Objectives of the Institutional STI Strategy

State the main objective as well as the specific objectives of the STI Strategy

3.5 Guiding Principles of the Institutional STI Strategy

State the principles that will guide effective implementation of STI Policies and Strategies

(E.g. Relevance to the country's Vision 2030 and the Constitution 2010; Quality, novelty and originality; Cost-effectiveness for desired results; Multi-disciplinary and cross-sectoral approach to problem-solving etc)

3.6 STI strategies for the MDA

Based on identified priority areas of development relevant to the MDA and in line with the Strategic Plan, list the strategic issues relevant to the MDA, corresponding objectives and strategies for Research, Science, Technology, and Innovation in the Table 3.1. A comprehensive list of STI Strategic Issues can be found in the [Development of Institutional STI Strategy Guide](#).

Table 3.1: STI strategies for the MDA

| S. No. | The Strategic Issue | Strategic Objective(s) | Strategies for Research, Science, Technology, and Innovation (Specify as pertains to the MDA) |
|--------|---|--|--|
| 1. | Human Resource Development | <i>E.g. To enhance quality and capacity of human resource and talent management</i> | <i>E.g.</i> <ul style="list-style-type: none"> • Increase RTI personnel (PhDs and Masters level) by x% • Enhance gender parity in STI programmes. • Provide mechanisms to attract and retain human resource in STI; |
| 2. | Infrastructure for STI, and Digital Readiness | <i>E.g. To enhance and strengthen STI infrastructure to support Programmes in priority areas</i> | <i>E.g.</i> <ul style="list-style-type: none"> • Establish the status of STI infrastructure and digital readiness • Allocate funds for the expansion of STI infrastructure |
| 3. | Funding/Investments in STI | <i>E.g. To develop mechanisms for sustainable financial resource mobilization and investment in STI</i> | <i>E.g.</i> <ul style="list-style-type: none"> • Develop a framework for resource mobilization • Invest .x% of Budget on R&D, Research Chairs Programmes, Technology & Innovation, Centre of Excellence, Science & Technology Parks, and/or Incubation Centres, Technology and Innovation activities. |
| 4. | STI advocacy and awareness | <i>E.g. To enhance STI advocacy and awareness</i> | <i>E.g.</i> <ul style="list-style-type: none"> • Support and coordinate annual conferences, science weeks, congresses, STI Olympiads, STEM mentorship programmes, exhibitions, fairs and expert dialogues on the role and state of STI • Engage with the County Governments on STI-based innovative county development strategies and programmes |
| 5. | Education, training and research | <i>E.g. To re-align education, training and research programmes to the national goals and regional/counties and industry needs</i> | <i>E.g.</i> <ul style="list-style-type: none"> • Promote gender equality, cultivate, and sustain interest in STEM at all levels of education. • Adopt a continuous review and implementation of the education curriculum to respond to the needs of the STI sector • Develop a mechanism for recognizing and rewarding achievement in Research • Develop programmes with industry to strengthen technological capabilities • Participate in conferences, exhibitions/fairs, STI networks • Ensure all Research is licensed as per statutory provisions, • Ensure research is aligned to the National Research Priority areas • Publish scientific papers in approved refereed journals |

| S. No. | The Strategic Issue | Strategic Objective(s) | Strategies for Research, Science, Technology, and Innovation (Specify as pertains to the MDA) |
|--------|--|--|--|
| 6. | Technology development, transfer and diffusion | <p>E.g. To strengthen the Intellectual Property Rights Regime</p> <p>To establish Innovation incubation centres and Science and Technology Parks</p> | <p>E.g.</p> <ul style="list-style-type: none"> • Develop and implement a National Intellectual Property Policy • Create awareness on the importance of Intellectual Property Rights. • Align Technology Development activities to National Priorities • Submit applications for Patents, and Register utility models • Strengthen industry-academia linkages to encourage commercialization, venture capitalists, and spin-offs • Establish technology transfer, and industrial liaison offices. • Participate in annual conferences, exhibitions, science weeks, and expert dialogues pertaining STI |
| 7. | Collaborations and partnerships in STI | <p>E.g. To establish strategic collaborations and partnerships at national, regional and international levels.</p> <p>To Strengthen existing collaborations and partnerships at national, regional and international levels;</p> | <p>E.g.</p> <ul style="list-style-type: none"> • Participate in STI networks at national, regional and international levels • Establish multidisciplinary and multi- institutional teams for collaborative research and development. |
| 8. | Gender Mainstreaming | <p>E.g. To promote gender equality in all STI related programmes and activities, and in decision making</p> | <p>E.g.</p> <ul style="list-style-type: none"> • Ensure gender equality in participation and distribution of opportunities in STI |
| 9. | Others (Specify) | | |

4.0 Implementation Framework of the Institutional STI Strategy

Develop an STI Strategy Implementation Framework/Matrix as guided in **Table 4.1**

Table 4.1: Implementation Framework of the Institutional STI Strategy

| The Strategic Issue | Strategy | Expected Results | Performance Indicator(s) | Means of Verification | Estimated cost |
|--|---|---|---|---|-----------------------|
| <i>E.g. Human Resource Development</i> | <i>Increase RTI personnel (PhDs and Masters level)</i> | <i>Increase in RTI personnel by x%</i> | <i>Number of recruited/promoted RTI personnel</i> | <i>Human Resource Records</i> | <i>Kshs. xxxxxxxx</i> |
| <i>E.g. STI advocacy and awareness</i> | <i>Support and coordinate annual conferences, science weeks, congresses</i> | <i>Increased STI advocacy and awareness</i> | <i>Number of conferences, science weeks and congresses held/participated in</i> | <i>Conference, science week and congress reports and other documentations</i> | <i>Kshs. xxxxxxxx</i> |
| | | | | | |

5.0 5. Monitoring and Evaluation (M&E)

5.1 Internal mechanism for M&E

Establish Internal Quarterly and Annually M&E Mechanism

5.2 STI Strategy Review

Review as per the MDA's established document review procedure