



**EAST AFRICAN COMMUNITY
EAST AFRICAN SCIENCE AND TECHNOLOGY COMMISSION (EASTECO)**

Concept Paper

**THE 2ND EAC REGIONAL SCIENCE, TECHNOLOGY AND INNOVATION
CONFERENCE, 20 - 22 OCTOBER 2021**

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BACKGROUND

The East African Community (EAC) is a regional inter-governmental organization comprising the Republics of Burundi, Kenya, Rwanda, South Sudan, the United Republic of Tanzania, and the Republic of Uganda. The aim of the Community is to foster Regional Integration and socio-economic development among Partner States through development of policies and programmes to widen and deepen co-operation in political, economic, social and cultural fields including science, technology and innovation. The Treaty for the Establishment of the East African Community recognizes Science and Technology as a key driver for sustainable socio-economic development. It explicitly provides for the Partner States to promote and support cooperation in the development and application of science and technology within the Community in Articles 5, 12 and 103. The 5th Extra-ordinary Summit of the EAC Heads of State held on 18th June 2007 established the East African Science and Technology Commission (EASTECO) as an institution of the EAC, in response to the provisions of the Treaty. The Protocol establishing EASTECO defines the overall objective of the Commission as to promote and coordinate the development, management and application of science and technology in Partner States to support regional integration and socio-economic development. In addition, the governments of the EAC Partner States, also launched several regional STI initiatives including the establishment of the Inter University Council of East Africa and the East African Health Research Commission.

Experiences from successful developing countries have shown that STI policies that are properly integrated into national and regional development strategies, combined with institutional and organizational changes, can help raise productivity, improve global competitiveness, support enhanced economic growth and facilitate employment creation. The EAC Common Market Protocol, therefore, accorded STI significant prominence as a driver for economic growth, with Article 42 articulating the cooperation of Partner States in Research and Development to facilitate co-operation in the development of science and technology within the Community. The Partner States have agreed to, among other issues: (i) Disseminate the results of activities in research, technological development and demonstration programs; (ii) Facilitate access to their technological and research facilities by researchers and other experts; (iii) Encourage private sector participation in activities relating to intra-regional research and transfer of technology; and (iv) Establish a mechanism for the co-ordination of Science, Technology and Innovation (STI) activities. Article 44 of the Protocol on the Establishment of the East African Community Common Market, equally underlines the need to disseminate and exchange industrial and technological information for enhanced socio-economic development of the region. Convening of Biennial STI Conference is one of the avenues of realizing the development of STI in the region. The conference brings together all

players in the STI system in the region and beyond to exchange information and create an effective network for collaboration that supports the translation of STI outputs into goods and services for the benefit of the community.

The 1st EAC Regional STI Conference was organized by the regional forum for science, technology and innovation (STI Forum), which comprised the East African Science and Technology Commission (EASTECO), the Inter-University Council for East Africa (IUCEA), the Nelson Mandela African Institution of Science and Technology (NMI-AIST) and other Science, Technology and Innovation stakeholders in the East African Community and beyond. The conference was supported by African Development Bank (AfDB) funding, which ended in 2019.

The 2nd EAC Regional STI Conference is being organized by EASTECO with support and in collaboration with stakeholders of STI in the region and globally, including IUCEA, AUC, AAS, Ministries responsible for STI, National Councils/Commissions of Science and Technology. The conference aims to provide a platform for the players in Science, Technology and Innovation stakeholders in the East African Community and beyond to share their experiences and results within the knowledge and technology generation, translation and transfer chain.

This 2nd EAC Regional STI Conference is a prestigious event, organized to provide a regional platform for academicians, researchers, managers, industrial participants and students to share their research findings with global experts. All full paper submissions will be peer-reviewed and evaluated based on originality, technical and/or research depth, accuracy and relevance to conference theme and topics.

JUSTIFICATION

A number of stakeholders exist within the STI space in the community. These stakeholders include a number of national institutions, government ministries for science, technology and innovation, national commissions for science and technology, research institutes, academies of science and non-government organizations. The stakeholders largely work in isolation and their level of collaboration in research, technology and innovation development is limited, resulting in uncoordinated research, duplication of research, and failure to implement research activities effectively. Furthermore, most of the research work done in the region remains on shelves and are not developed further or circulated adequately. In addition, no clear collaboration mechanisms between non-educational research organizations and universities exist, and platforms for the exchange of scientific information are limited. The STI conference will therefore enhance networking relations among researchers, technology developers and innovators;

establish a platform for stakeholders for setting agenda as well as priorities and niches in STI in the region; enhance linkages and partnerships between academia, industry and the public sector; enhance exposure to stakeholders on priority issues for research, extension services, teaching and learning; and enhance capacity for benchmarking research outputs in the region. The output of the conference will be published in the East African Journal of Science, Technology and Innovation (EAJSTI) to boost the dissemination of research findings within the region and improve regional visibility and competitiveness. The STI Conference will therefore stimulate the establishment and strengthening of strategic alliances among stakeholders to promote the generation, dissemination and translation of research findings; building collaborations and networks; and harness partnerships among stakeholders in the region. The conference, therefore, envisions enhanced sharing of research findings, collaboration and linkages through conference presentation, ministerial roundtable, exhibitions and publication for regional integration and socio-economic development.

OBJECTIVES

1. To provide a platform for information and knowledge sharing through conference presentation, exhibitions and publication;
2. To enhance the dissemination of research results through publication in peer review journal;
3. To stimulate and promote networking and collaboration among the scientific community in the EAC region;
4. To promote uptake of research findings by government and industry for development of policies, products and services.

CONFERENCE ACTIVITIES AND PLANS

Conference Activities

In order to deliver the conference objectives, the following activities shall be undertaken:

- i. Promotion of submissions of papers for oral presentation and for publication in the book of abstracts and conference proceedings;
- ii. Promotion of submissions of papers for poster presentation and for publication in the book of abstracts and conference proceedings;
- iii. Identification, invitation and facilitation of key stakeholders to participate in the conference;
- iv. Holding of the Scientific Conference where research papers, reviews, Keynote presentations, and topical scientific papers will be presented;
- v. Holding of the Ministerial Conference where policy and strategic recommendations and resolutions are made;

- vi. Holding of the Exhibition and Trade fair where Academia, Public and Private Organizations will interact;
- vii. Publishing of Preconference Book of Abstracts, Proceedings of the Conference and/or Special Issue of proceedings in a peer reviewed journal;
- viii. Publication of recommendations of the conference and translation of the resolutions into policy briefs for dissemination and uptake at national and regional levels.

Theme of the Conference

The theme of the conference - *The Role of Science, Technology and Innovation in EAC Regional Integration and Socio-Economic Development in the phase of Covid-19 Pandemic.*

Sub themes of the Conference

Papers shall be submitted in aspects of the following sub themes but not limited to areas specified:

(a) Agriculture, Food Security and Rural Development

- (i) Livestock
- (ii) Crops
- (iii) Fisheries and Aquaculture
- (iv) Agroforestry
- (v) Apiculture

(b) Health and wellbeing

- (i) Nutrition
- (ii) Preventive medicine and Public health
- (iii) Medicine
- (iv) Biomedical science
- (v) Pharmacy

(c) Natural Resources and Environment

- (i) Land and water
- (ii) Integrated soil and fertility management
- (iii) Climate change and disaster risk management
- (iv) Forestry
- (v) Mining and geology
- (vi) Biodiversity and conservation

(d) Infrastructure

- (i) Transportation and logistics
- (ii) Built environment
- (iii) Engineering

(e) Energy and Industrial Development

- (i) Renewable and non-renewable energy
- (ii) Manufacturing

(f) Information and Communication Technology (ICT)

- (i) Software and application engineering
- (ii) E-governance
- (iii) Internet of things (IoT)
- (iv) Data Science/ Big Data
- (v) Artificial Intelligence

(g) STEM

- (i) Material science
- (ii) Space sciences
- (iii) Mathematics and applications
- (iv) Physical, chemical and biological sciences

Mode of the Conference

The conference will be held in a hybrid mode through virtual and face-to-face platforms. An event organizer (consultant) will be contracted to oversee logistical arrangements, assisted by the Technical Committee and the Regional Organizing Committee.

The Regional Organizing Committee

The Regional Organizing Committee shall comprise of all Principal Technical Heads of Departments in Project and Programs, and team heads of technical and consultancy teams. In addition, at least a representative from each Partner States will participate in the Regional Organizing Committee. The role of the Organizing committee is to guide and coordinate all technical, operational and planning processes to ensure harmonious, effective and efficient delivery of the conference.

The Regional Technical Committee

The Regional Technical Committee shall comprise of the Executive Committee of the Editorial Board, under the leadership of the Editor-in-Chief. The committee shall perform the following roles:

- i. Guide in the programing of Theme and subthemes of the conference in line with the EASTECO focus on science communication;
- ii. Review and authorize the content and design of the call for submission of abstracts and full papers;
- iii. Program and deliver the review process (including approval of Abstracts) of Abstracts and full papers in time;
- iv. In liaison with the Secretariat and the event organizer, develop a realistic conference program and populate it with competent role players;
- v. Oversee technical aspects development and publication of Preconference Book of Abstracts, Proceedings of the conference and/or publication of papers in special issue of peer reviewed journal;
- vi. Quality assurance of technical outputs in Conference Report and its extracts including policy briefs, conference recommendations and resolutions;
- vii. Review the overall conference performance and submit recommendations for future direction and improvement.

The Consultant

The role of the Consultancy firm is to support the Conference Co-organizers in general and EASTECO in particular to prepare and implement all required tasks for a successful event, including the execution of all required tasks related to the preparation and hosting a successful and professional Meeting, execution of the conference organization work-plan, invitations and communication with participants, and capturing the reports and minutes of the meetings of the Conference Steering Committee. Working closely with EASTECO staff, the consultant will also submit to the co-organizers and EASTECO Secretariat all required proposals for a successful Conference, including suitable services regarding provision of information to participants, invitation, sponsorship and registration process. Detailed roles shall be outlined in the Contract Document.

THE STRUCTURE OF THE CONFERENCE

The conference will be structured as follows along thematic areas. Each thematic area will be organized into session with closely related topical presentations, preceded by a keynote presentation. A general plenary discussion will be held at the end of each session where key issues will be discussed and session recommendations derived to inform

conference resolutions. In addition, special sessions for exhibitions of scientific innovations and technologies will be interspersed within the thematic sessions, in which participants will be allowed to visit exhibition booths of their interest to interact. A ministerial terminal session will be held to present consolidated recommendations to a technical policy panel for roundtable discussion to come up with conference resolutions. detailed program will be developed to guide the conference structure

EXPECTED OUTPUTS

- i. Scientific papers presented and discussed and a book of abstracts and journal papers published;
- ii. Linkages among scientists, academia and industry established;
- iii. Linkages between policymakers, individuals and organizations developed;
- iv. Other dissemination channels such as technical notes, policy briefs, magazines on science, audiovisual and online platforms for public consumption developed.

EXPECTED OUTCOMES

- i. Enhanced networking relations among researchers, technology developers and innovators;
- ii. Established Platform for STI stakeholders for setting agenda as well as priorities and niches;
- iii. Enhanced linkages and partnerships between academia, industry and the public sector;
- iv. Enhanced capacity for exchange of scientific ideas among researchers, faculty, and industrialists in the region.