

CONCEPT NOTE OF THE 3RD KATTI NATIONAL TVET EXHIBITION AND ROBOTIC CONTEST

1.0 Introduction

Science, Technology and Innovation are essential ingredients in the industrialization and sustainable development of nations as a component of growth and development. The UN Sustainable Development Goals (SDGs) and the African Union's Agenda 2063 (implemented through ST&I Strategy for Africa –STISA 2024), focuses on socio-economic transformation of the continent. This calls for a critical re-evaluation and application of Science, Technology and Innovation as an engine and driver of knowledge based economies in general. Without innovation, it will be very difficult and very costly to sustain current growth trajectories while addressing major environmental issues such as climate change. Consequently, emerging economies are giving priority to R&D activities and incentives for the dissemination and adoption of green technologies.

According to UNESCO-UNEVOC (2006), TVET has as one of its main goals the role to empower people to contribute to environmentally sound sustainable development through their occupations and other areas of their lives. Technical and vocational education, as an integral component of life-long learning, has a crucial role to play in this new era as an effective tool to realize the objectives of a culture of peace, environmentally sound sustainable development, social cohesion and international citizenship.

In view of the above, the 3rd KATTI National TVET Exhibition and Robotic Contest offers a platform for all TVET Institutions to showcase various initiatives in Science, Technology and Innovation with intent to augment Kenya's drive to sustainable development.

2.0 Theme and Subthemes of the 3rd KATTI National TVET Fair and Exhibition

The theme of the 3rd National TVET Fair and Exhibition is *“TVET for a Green Economy: The Role of Science, Technology and Innovation”*.

2.0.1 Subthemes

- Enhancing and Supporting TVET in Achieving Kenya's Big Four Agenda.
- Science, Technology and Innovation for Agricultural and Environmental Sustainability
- Science, Technology and Innovation for Socio-Economic Growth

3.0 Objectives of the 3rd KATTI National TVET Fair and Exhibition

3.1 Main objective

The main objective of the fair and exhibition is to provide a forum for TVET stakeholders to showcase various initiatives of the sector in Kenya's drive to sustainable development.

3.2 Specific Objectives

- To show-case and appraise the achievements and breakthroughs of the TVET sector in ST&I;
- To facilitate dialogue and interactions amongst TVET stakeholders on the role of ST&I towards growing a green economy; and,
- To create awareness and popularize TVET among the public;

4.0 Methods

The 3rd KATTI National TVET fair and exhibition will include all the Kenya Association of Technical Training Institutions (KATTI) member institutions as participants and will be held at two levels; the regional level and the national level. The regional level will comprise the five KATTI regions of Coast, Nairobi, Mt. Kenya, Rift Valley and Western. Both levels will comprise of three main activities, Exhibition of Innovations, Robotic Contest and Research Paper Presentations.

4.1 Exhibition of Innovations

- Staff and trainees of participating institutions will develop innovations based on the TVET fair theme to present at the respective regional fair.
- Innovations will be presented in twelve categories of; Electrical Engineering, Electronics Engineering, Civil Engineering, Building Technology, Mechanical Engineering, Automotive Engineering, Information Communication Technology (ICT), Business, Applied Sciences, Agricultural Science, Food and Beverage and Clothing and Textile Technology.
- Each institution can register at most three innovations per category at the regional level.
- Qualified judges from Industry and institutions of higher learning who are professionals in respective subject areas as informed by the twelve categories will judge the innovations as per the designed evaluation tool and present merit lists of performance.
- The best three innovations per category will qualify for presentation at the National TVET fairs and exhibitions.
- Special needs institutions in respective regions will compete in a unique group and will also have the best three innovations per category qualifying to the national event. Any special needs institution that may wish to

4.2 Robotic Contest

- The robotic contest will be held at the national level according to the rules sent by the Directorate of Vocational and Technical Education.
- KATTI regions that may so wish to hold the robotic contest at the regional level are encouraged to do so.

- An institution may register up to three robotic teams for the contest. All institutions are encouraged to present at least one robot for the contest.

4.3 Research Paper Presentations

- Authors will send abstracts of research papers to tvetfairsconference@gmail.com
- The research committees will vet and accept abstracts for paper presentation at the respective regions.
- Research Papers will be judged based on the judging template designed
- The best eight research papers, with a mark of 50% and above from each region will qualify for presentation at the national event.

5.0 Event Dates

Regional Level

- Nairobi and Rift Valley to be held from 27th February, 2019 to 2nd March, 2019.
- Coast, Western and Mt. Kenya 6th to 9th March, 2019.

National Level

- Kenya Coast National Polytechnic as host from 27th to 30th March, 2019.