

Promotion of Research, Innovation, Greening and Digitalization in Kenyan TVET Institutions

BILT Conference Matchmaking Session
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Presentation Outline

Introduction

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1.0 Introduction

- ❖ TVET Authority is a state Corporation established under the TVET Act No. 29 of 2013 to regulate and coordinate TVET in Kenya through accreditation of institutions, programmes and trainers;
- ❖ The Authority was established to address the emerging reforms and trends in the labor market and the TVET subsector (Access, Relevance, Quality and Equity);
- ❖ Prior to its establishment, the regulation of TVET was fragmented between different line ministries and county governments





Introduction Continued

- ❖ In Kenya, TVET plays a vital role in provision of skilled workforce for the labour market and for self-employment
- ❖ The institutions offer programmes at different levels and examined by **approved examining bodies** (KNEC, NITA, KASNEB and **accredited** foreign examining bodies).
- ❖ TVET institutions are classified into three broad categories, National Polytechnics (NPs), Technical and Vocational Colleges (TVCs) and Vocational Training Centres (VTCs).





Introduction (Achievements by TVETA)

- ❖ Improved perception of TVET by organizing and participating in awareness campaigns (Skills competitions, conferences, Shows);
- ❖ Licensed 6,806 trainers
- ❖ Accredited 2,340 TVET institutions (1087 VTCs, 1241 TVCs and 12 NPs)
- ❖ Periodic quality audit of the accredited institutions
- ❖ Approved 457 CBET curricula
- ❖ Developed training and regulatory standards
- ❖ Trained 300 TVET monitors and evaluators





Achievements by TVETA continued

- ❖ Established **18** collaborations and partnerships;
- ❖ Conducted nine research studies on TVET;
- ❖ Published two volumes of the Kenya Journal of TVET (KJ-TVET);
- ❖ Published four issues of TVET Magazine;
- ❖ Developed the Kenya TVET National Skills Gateway;
- ❖ Published National TVET Standards Kenya Report 2020;
- ❖ Achieved ISO 9001:2015 certification.





2.0 Research and Innovations in TVET

- ❖ TVET has gained increased attention and popularity globally and plays a key role in provision of skilled workforce for sustainable development;
 - ❖ The potential and impact of TVET on development, can be realized through continuous review of the curricula to address emerging technology;
- Research & innovation as well as commercialization of research findings and innovations can help in solving common problems facing societies and contribute to sustainable development;





Research and Innovations in TVET cont..

- ❖ Research & innovation should therefore be integrated in all TVET programs.
- ❖ The research in the Kenyan TVET subsector had for a long time been fragmented and even available data could not be readily traced;
- ❖ TVET also lacked a streamlined system for patenting innovations.





3.0 Integration of Research, Innovation, Greening and digitalization in TVET

- ❖ Research, Innovation and Greening is included as part of criteria for accreditation and quality assurance
- ❖ Research and Innovations have also been promoted through STI mainstreaming that was introduced in the FY 2021/2022 as National Government PC indicator in performance contracting for all public TVET institutions
- ❖ TVETA has developed ODeL standards to provide clear guidelines for online training





Integration of Research, Innovation, Greening and digitalization in TVET Continued

- ❖ A training and digital content development centre (Prof Kanwar) has been established at KTTC to build capacity of trainers on online and blended learning techniques;
- ❖ TVET Authority is working closely with stakeholders to establish a central TVET data repository to mitigate duplication and provide easy access to data for decision making and policy formulation;
- ❖ Annual publication of KJ-TVET is promoting research in TVET and providing platform for knowledge sharing on TVET research findings;



Integration of Research, Innovation and Greening in TVET Continued

- ❖ Plans are in place to synthesize and translate research findings in KJ-TVET to improve dissemination and commercialization
- ❖ Other Initiatives used to promote research and innovation in TVET include:
 - ✓ Robotic contests and TVET fairs
 - ✓ Africa Tech Challenge (takes form of a training program and competition - most outstanding participants get full scholarships to prestigious Chinese universities)
 - ✓ WSI competition



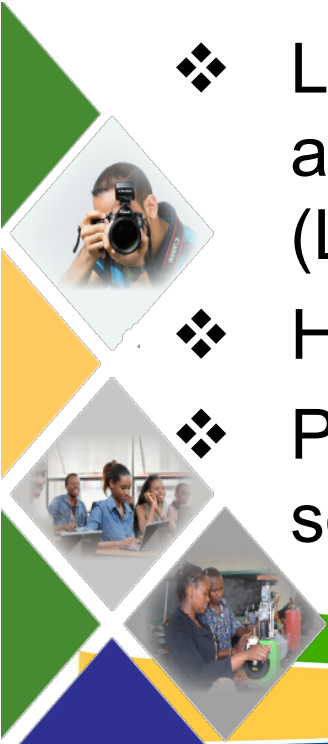
4.0 Commercialization of Research and Innovations

- ❖ A significant number of TVET Institutions have established commercial/ production units and incubation centres which provide avenues for commercializing research and innovations
- ❖ Commercialization of research findings and innovations is still generally weak due to lack of national framework on commercialization
- ❖ KeNIA which is mandated to promote innovation and enterprise development from research ideas is offering support.



5.0 Challenges in promotion of research, Innovation, Greening and Digitalization in TVET Institutions

- ❖ Limited funding/fundable ideas;
- ❖ Relatively high initial capital required for setting up some greening projects;
- ❖ Low capacity of trainers to effectively coordinate and participate in research, innovation and ODeL (Lack of online training content for some courses);
- ❖ High cost of internet bundles;
- ❖ Poor internet infrastructure and lack of electricity in some parts of the country;



6.0 Conclusion

- ❖ Although remarkable progress has been made in promoting Research, Innovations and Greening in TVET, gaps still exist in commercialization of research findings, innovations and digitalization (uptake of online training);
- ❖ Capacity building and increased funding can enhance digitalization and translation of research findings and innovations into actual products (KeNIA to offer the support)
- ❖ Development of National policy on commercialization and collaboration with industry should be expedited to promote industry-initiated research





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