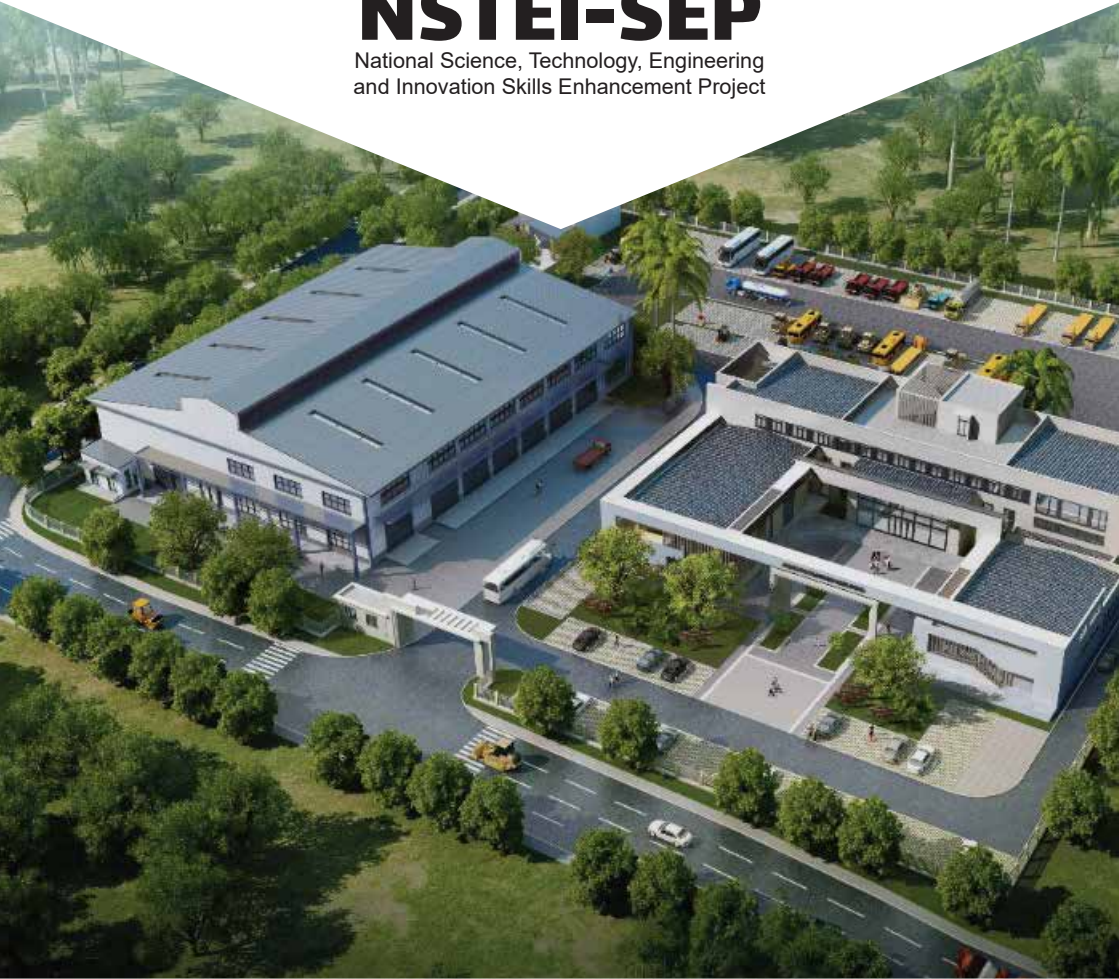




NSTEI-SEP

National Science, Technology, Engineering
and Innovation Skills Enhancement Project



Uganda National
Council for Science
and Technology



The Republic of Uganda



Introduction

Uganda National Council for Science and Technology (UNCST) is an Agency of the Government of Uganda (GoU) established by an Act of Parliament, Cap 209 of the Laws of Uganda. UNCST is mandated to support and regulate scientific research, technological innovations and product commercialization for socio-economic transformation. In executing its mandate, UNCST supports the growth and enhancement of Uganda's economy through the strategic deployment of scientific knowledge and technological innovations in accordance with the country's development aspirations - NRM Manifesto, National Development Plan (NDP III), & Vision 2040.

Government of Uganda recognizes the role science, technology and innovation (STI) play in generating new knowledge and the requisite skill sets for increased productivity and competitiveness. Uganda's aspiration of transforming from a peasant to a modern and prosperous country by 2040 is however constrained by critical inherent problems including; i) inadequate human resources in science and technology (HRST), ii) low industrialization and value addition, iii) youth unemployment, iv) inadequate S&T infrastructure, v) low competitiveness, vi) inadequate local capacity/low level of local content, and vii) inadequate academia-industry linkages.

Subsequently, the Government of Uganda through the Uganda National Council for Science and Technology and with support from the People's Republic of China (PRC) is implementing the National Science, Technology, Engineering and Innovation Skills Enhancement Project (NSTEI-SEP) to enhance the technological and skill base of Ugandans to participate in strategic national infrastructural projects and manufacturing industries.

Relevance

In line with Vision 2040 agenda of setting up science and technology parks, engineering centres, technology and business incubation centres that meet international standards, and in an effort to enhance the technological and skill base of the Ugandan graduate, craftsman, technician and engineer to participate in strategic national infrastructural projects and manufacturing industries, the project is establishing the:



National Institute of Technopreneurship (NIT)

at Rwebitete - Kiruhura District to enhance the technological and innovative base of Ugandans through a **Flexible Factory Learning and Infrastructure Model**.



Technology Innovation and Business Incubation Centre (TIBIC)

at Kampala Industrial Business Park, Namanve - Mukono District that will act as a platform for technology development via the **Process Industry Learning Factory Model**, including common user facilities and shared workspaces for scientists and innovators.



NSTEI Technical Service Company

to provide the services strategic to the country's development agenda, including, **equipment leasing and machinery rentals for infrastructural projects**, contract engineering, maintenance of engineering machinery and equipment, and provision of technical services for companies implementing various infrastructure projects in the country.

Correspondingly, in line with the STI sector outcomes, the project intends to provide adequate state-of-the-art STI infrastructure to generate and effectively apply STI based on the contemporary needs of society.





“ Ugandans designing, implementing and managing key infrastructural projects and creating globally competitive businesses.

Goal and Objectives

The goal of the Project is to ensure Ugandans design, implement and manage key infrastructural projects and create globally competitive businesses.

The project will:

- Establish the **National Institute of Technpreneurship (NIT)** and **Technology Innovation and Business Incubation Centre (TIBIC)** to enhance STEI Skills development and promote STEI based enterprise development among graduates, craftsmen, technicians, engineers as well as other scientists and innovators
- Re-tool graduates, craftsmen, technicians and engineers and equip them to undertake various infrastructural works (electricity distribution, water drilling and distribution, road construction, building construction, pipeline construction, light railway construction, etc.) to promote local content, generate employment and create wealth.
- Establish technology, innovation and business incubation facilities including workspaces and common-user facilities for scientists and innovators to help them further develop their technologies and business models.

Expected Outcomes

The Project addresses a pressing need to help build Uganda's S&T human capital needed to foster its socioeconomic development and poverty reduction agenda. The project will ultimately empower Ugandans with the capacity to design, implement and manage national infrastructure projects while at the same time supporting Ugandan scientists and innovators to commercialize viable research and development outputs. In terms of feasible outcomes, the project will:

- increase active participation of the Ugandans in national infrastructure development projects. **Annually, the centres are expected to retool over 1,500 Ugandans specially the youths, craftsmen, and technicians;**
- enhance the emergence of technology-oriented business start-ups;
- increase competitiveness of Uganda's micro, small and medium scale enterprises (MSME) sector through import substitution and export diversification;
- spur locally manufactured tools designs; and
- enhance revenue generation and job creation from evolving science and technology hubs. **The project is expected to create over 12,000 direct and indirect jobs.**

“ Increasing competitiveness of Uganda's MSME sector through import substitution and export diversification



Target Service Hubs

The Project is designed within the context of the S&T and human capital development priorities of the country, and it will be open for competition and participation by all Ugandans cutting across 9 technology majors of metallurgy (welding and fabrication), industrial/mechanical technology, automotive technology, civil construction technology, electropneumatics, agricultural mechanization, leather products processing technology, and textile design technology.

An estimated **1500 personnel will be competitively selected and professionally retooled** on an annual basis to improve the learning outcomes and employability of Ugandans specially the youths and scaling-up R&D and innovation outcomes.

The Project is implemented in alignment with the Uganda Vision 2040, **based on faster, sustainable, and inclusive growth**. It emphasizes **increasing the supply of highly-skilled workers to drive the economy**, as well as helping nascent engineering majors catch up with the relatively more advanced ones in the country.

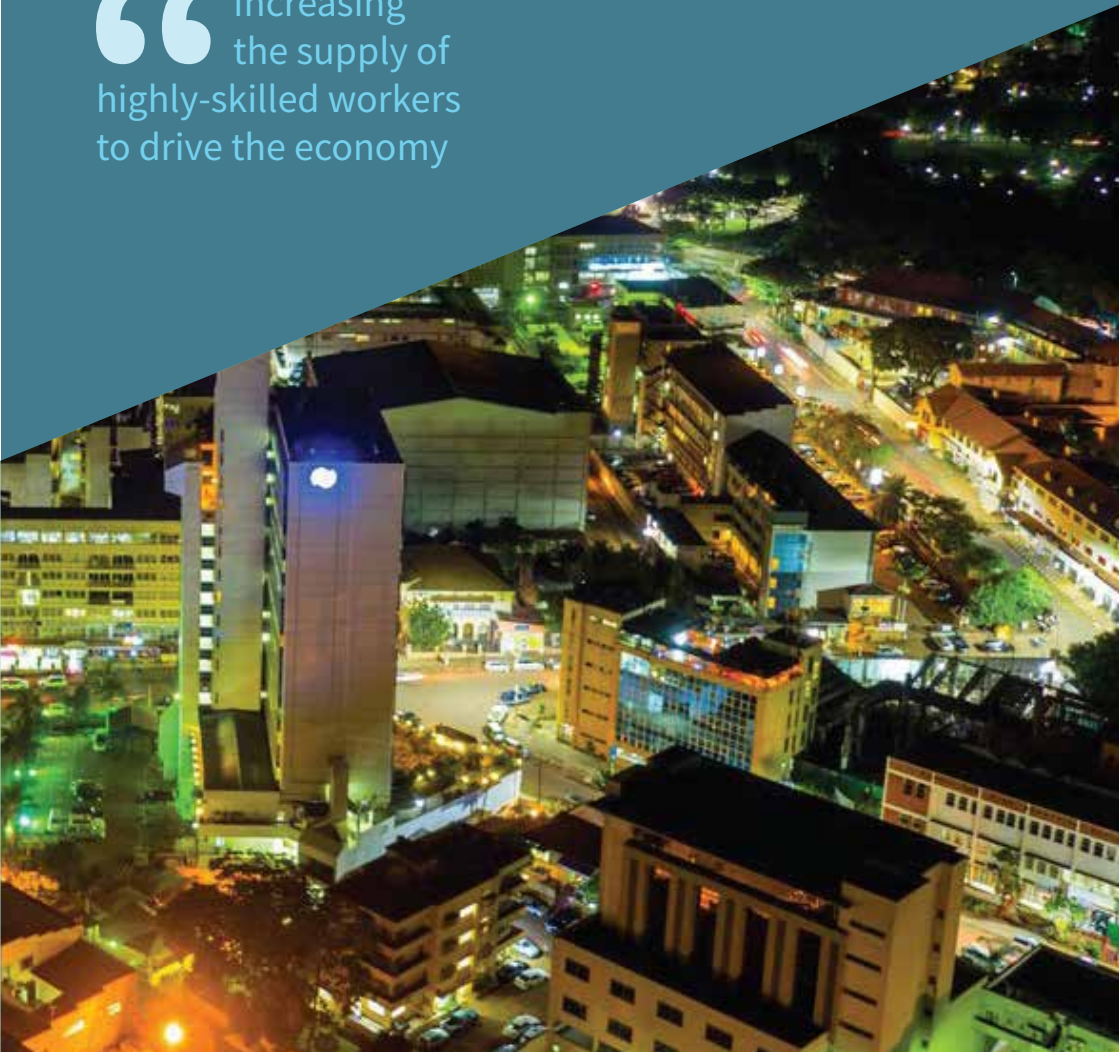
NIT	TIBIC
<ul style="list-style-type: none">• Construction Machinery Technology• Civil Engineering Technology• Automotive Technology• Agricultural Mechanization• Industry / Mechanical Technology• Metallurgical Technology• Electronic and electrical R&D	<ul style="list-style-type: none">• Finished Leather Processing Technology• Textile Design Technology• Work Spaces for Scientists and Innovators• Common-User facilities (State-of-the-Art Testing Units)• Training Centres for multiple disciplines, quality upgradation• Specialised research and development (R&D) facilities• Technical and Business Assistance Services• Specialised Technological Support Services• Specialized Engineering Machinery Rental Services



The Centres will provide state-of-the-art infrastructure to enable Ugandans apply science and technology to address pertinent needs of the Ugandan society.

The centres will also build capacity of locals to design, implement and manage key infrastructure and technology projects and create globally competitive businesses in the spirit of Buy Uganda Build Uganda (BUBU). The creation of the Technical Service Company (TSC) will concretize and sustain investments in infrastructure and skills deployment through the provision of machinery rental, contract manufacturing and techno-business related services to Ugandan scientists and innovators.

“ Increasing
the supply of
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Contact:

Executive Secretary
Plot 6. Kimera Road, Ntinda
P.O. Box 6884, Kampala Uganda
Tel.: +256 414 705 500/5
E-mail: info@uncst.go.ug
Web: www.uncst.go.ug