



EASTRIP

Skills for Transformation & Regional Integration



WORLD BANK GROUP



From Working in Silos to TVET Industry Links and Collaborations

The Case of EASTRIP Regional Flagship TVET Institutions



Contents:

Introduction	1
Key Findings from the 16 RFTIs	2
Transport and Infrastructure	3
• Dire Dawa Polytechnic College, Ethiopia	3
• Kombolcha Polytechnic College, Ethiopia	4
• Kenya Coast National Polytechnic, Kenya	6
• National Institute for Transport (NIT), Tanzania	8
• Meru National Polytechnic College, Kenya	9
• Kenya Institute of Highways and Building Technology, Kenya	10
Manufacturing	13
• Federal TVET Institute, Ethiopia	13
• Hawassa Polytechnic College, Ethiopia	14
• Holeta Polytechnic College, Ethiopia	16
• Kisumu National Polytechnic, Kenya	18
• Dar es Salaam Institute of Technology, Mwanza Campus, Tanzania	20
Power and Energy	22
• General Wingate Polytechnic College, Ethiopia	22
• KenGen Geothermal Training Center, Kenya	24
• Arusha Technical College, Tanzania	26
Information and Communication Technology	28
• Dar es Salaam Institute of Technology, Dar es Salaam Campus, Tanzania	28
Tourism	30
• Tourism Training Institute, Ethiopia	30
Comparative Summary of EASTRIP Initiative Partnership vs Traditional Partnerships	33
Conclusion and Recommendations	35
Annex 1. Component 2-Achievements at National Levels (Ethiopia, Kenya and Tanzania)	35
Annex 2. Component 3 – Achievements by Regional Component (RFU)	36

Acknowledgment

This paper builds on the outstanding work of the 16 Regional Flagship Technical and Vocational Education and Training (TVET) Institutes (RFTIs) across Ethiopia, Kenya, and Tanzania. Since the launch of the East Africa Skills for Transformation and Regional Integration Project (EASTRIP) in 2019, the RFTIs have worked extensively with industry, government, and other stakeholders to implement five-year Strategic Investment Plans (SIPs) with development objectives directly linked to student labor market outcomes. The Inter-University Council for East Africa (IUCEA) team, under the leadership of Dr. Joseph Cosam,

Project Coordinator, EASTRIP and Prof. Gaspard Banyankimbona, Executive Secretary of IUCEA, provided political, technical, and coordination support. Mr. Hailemicheal Asrat, Monitoring and Evaluation Officer for EASTRIP, compiled the case studies, and Mr. Godwin Bonge Muhwezi, Communication Officer, EASTRIP, for proofreading, designing and typesetting. The World Bank teams, led by Dr. Xiaoyan Liang, Lead Education Specialist, and Dr. Nobuyuki Tanaka, Economist, provided leadership and technical support.

September 2025





1. Introduction

The East Africa Skills for Transformation and Regional Integration Project (EASTRIP) represents a scalable and impactful initiative, contributing to enhancing employability, productivity, and job creation, thereby supporting national and regional development. Ethiopia, Kenya, and Tanzania participate in EASTRIP at the institutional and system levels, while the Inter-University Council for East Africa (IUCEA) serves as the regional facilitation unit and has a pivotal role in coordination and in the regional components. Since its inception, EASTRIP has achieved remarkable progress, which is reflected in the increase in annual student enrollments from 6,971 at baseline to 57,875 in 2025. Among its key achievements, EASTRIP has prioritized robust collaboration between technical and vocational education and training (TVET) institutions and industry partners.

The objective of this paper is to document and analyze case studies of 16 regional flagship TVET institutes (RFTIs) of EASTRIP, focusing on best practices and successes in TVET-industry links. The methodology involves a qualitative approach, drawing on secondary data from RFTI reports and primary data through key informant interviews with experts. Success stories and lessons learned are synthesized to provide conclusions and recommendations.

EASTRIP aims to increase the access to and improve the quality of TVET programs in selected RFTIs and to support regional integration in East Africa. The regional integration aspect of the project includes the harmonization of TVET education and training systems. The project emphasizes harmonizing TVET qualifications and systems, developing regional occupational standards and curricula, and facilitating the mobility of students and professionals across borders.

Collaboration between TVET institutions and

industry is essential for success. By adopting a structured partnership model, EASTRIP has strengthened the alignment between vocational training and industry requirements. This approach has contributed to the development of a skilled, employable workforce and has advanced regional integration and socioeconomic development.

Collaboration between RFTIs and industries emerged during the preparation of the EASTRIP and persisted during the inception stage, throughout implementation, and the present. The approaches to collaboration are various, including (1) the development of a strategic investment plan (SIP), (2) the establishment of the Industry Advisory Board (IAB), (3) the signing and implementation of the memorandum of understanding (MoU), (4) curriculum development and revision, (5) industrial attachment, and (6) tracer studies.

1. **SIP development.** Each RFTI developed a SIP in close collaboration with industry partners, ensuring alignment with labor market needs. Industry endorsement was secured through formal letters attached to the SIPs.
2. **IAB establishment.** All RFTIs established IABs to guide curriculum design, ensure industry relevance, identify emerging skill requirements, and foster employability among graduates.
3. **MoU signing.** RFTIs formalized industry partnerships through MoUs, which detailed collaboration objectives, roles, intervention areas, and implementation frameworks.
4. **Curriculum development and revision.** The joint development and review of curricula ensured that training programs reflected current industry standards, technologies, and skill demands, with continuous input from industry stakeholders.
5. **Industrial attachment.** The program facilitated the placement of trainees



and teaching staff in industries, thereby enhancing their practical skills, their exposure to modern workplace environments, and ongoing feedback to improve training delivery.

6. **Tracer studies.** Regular tracer studies were conducted to track graduate employment outcomes, measure the relevance of training, and inform continuous improvement in TVET programs.

Institutional incentive mechanisms are embedded within the EASTRIP design. EASTRIP employed a results-based financing approach, linking the disbursement of funds to performance indicators, such as industry-accredited programs, industrial attachments, and curriculum development.

2. Key Findings from the 16 RFTIs

The 16 RFTIs are distributed across the three participating countries, Ethiopia, Kenya and Tanzania (refer to table 2.1).

Table 2.1 The distribution of the 16 RFTIs

Regional priority	Focus	RFTI	Country
Transport and infrastructure	Railway	Dire Dawa Polytechnic College	Ethiopia
	Road	Kombolcha Polytechnic College	Ethiopia
	Marine	Kenya Coast National Polytechnic	Kenya
	Air	National Institute of Transport	Tanzania
	Building infrastructure	Meru National Polytechnic	Kenya
	Highway infrastructure	Kenya Institute of Highway and Building Technology	Kenya
Manufacturing	Tool making and leather	Federal TVET Institute	Ethiopia
	Textile and garment	Hawassa Polytechnic College	Ethiopia
	Agroprocessing	Holeta Polytechnic College	Ethiopia
	Textile	Kisumu National Polytechnic	Kenya
	Leather	Dar es Salaam Institute of Technology, Mwanza Campus	Tanzania
Power and energy	Power and energy	General Wingate Polytechnic College	Ethiopia
	Geothermal	KenGen Geothermal Training Center	Kenya
	Hydro	Arusha Technical College	Tanzania
Information and communication technology	Information technology	Dar es Salaam Institute of Technology, Dar es Salaam Campus	Tanzania
Tourism	Tourism	Tourism Training Institute	Ethiopia





Transport and Infrastructure

Dire Dawa Polytechnic College, Ethiopia

Dire Dawa Polytechnic College (DDPTC), Ethiopia, has developed strong partnerships with over 15 industries through signed MoUs, thereby enhancing technical and vocational education. These collaborations, including with Ethio-Djibouti Standard Gauge Railway Corporation, Dire Dawa–Dewele Railway Company, Han Plust Manufacturing PLC, and others, focus on mutual benefits, such as industrial attachments, problem-solving, and skills development.

Key achievements include the following:

- Teachers participated in industrial attachment programs to address real industry challenges. For example, at Dire Dawa Food Complex PLC, trainers manufactured a replacement fly-finger part for a biscuit machine. This prevented costly imports and preserved jobs.
- At Ethio–Djibouti Standard Gauge Railway Corporation, the college repaired and painted over 200 shipping containers, generating approximately US\$53,700 in revenue.
- For Han Plust Manufacturing PLC, college trainers designed, produced, and assembled machine spare parts, saving the company significant downtime and over two months of lost production. This partnership earned the college more than US\$4,300.
- Dire Dawa–Dewele Railway Company donated valuable training materials, including 1 locomotive, 200 track rail sleepers, 22 rails, and 2 bogies (worth more than US\$300,000) and assigned technical experts for railway line projects at the college.



Fly-finger spare part produced by DDPTC



Materials donated by the Dire Dawa-Dewele Railway Company



The machine spare parts produced by DDPTC for Han Plust



To ensure lasting benefits from industry partnerships, sustaining these collaborations is essential. For example, the college has received a large, government-provided fabrication and production center equipped with modern machinery. The center workshop now produces materials for various industries and institutes, and the college is working to establish it as a legally recognized, college-owned public enterprise. Once this process is complete, the center will begin accepting customer orders and generating income for the college.

Key lessons from the DDPTC experience in building strong TVET-industry links include the following:

- Develop partnerships that offer mutual benefits to the college and industries
- Raise industry awareness about the college’s capabilities and offerings
- Sign MoUs that include clear, actionable plans with industry partners
- Promote the college’s technical capacity to build industry trust
- Hold regular meetings and monitor progress to strengthen these partnerships

Performance Summary

- Enrollment has increased to 725 from a baseline of zero.
- Women student enrollment stands at 60, against a target of 61.
- Regional student enrollment has reached

26, up from a baseline of zero.

- Graduate employment within six months after graduation has risen to 87 percent from a baseline of 74 percent. Women’s employment has reached 82 percent, relative to a baseline of 61 percent.
- The number of demand-driven programs that have been developed is now 40, up from a baseline of 3; this includes 12 short-term and 28 long-term programs.
- Construction progress and equipment supply are advancing well, with an approximately 93 percent completion rate.
- The annual income generated by the RFTIs has reached US\$4.1 million, relative to a baseline of zero.
- The number of MoUs signed has increased to 16, up from a baseline of zero.
- Tracer studies are being conducted annually in a consistent manner.



Fabrication and Production Center under the Dire Dawa Bureau of Skill, Labor, and Technology Development, DDPTC

Kombolcha Polytechnic College, Ethiopia

Kombolcha Polytechnic College (KPC) is evolving into a regional center of excellence in automotive technology. Recognizing that classroom instruction alone is insufficient for preparing job-ready graduates, KPC prioritized partnerships with industry. In the rapidly evolving automotive sector, practical skills and alignment with current industry standards are essential. To address this, KPC established a strategic collaboration with Belayab Automotive Industry, a reputable company known for its

modern diagnostic tools and skilled workforce.

A formal MoU was signed between KPC and Belayab on March 21, 2022, to solidify this collaboration. The partnership addressed persistent challenges, such as outdated curricula, limited practical experience among students, and insufficient industry engagement among instructors. These are common issues across Ethiopian TVET institutions.





The partnership was designed as a multifaceted engagement, including the following:

- Instructor upskilling: 12 KPC trainers participated in industry attachment programs, allowing them to gain current, hands-on experience.
- Joint curriculum development: Belayab Automotive Industry provided direct input into curriculum updates across short- and long-term programs, ensuring that the content reflected real-world industry needs.
- Student internships: Students accessed hands-on training opportunities through internships and practical projects at Belayab facilities.
- Institutional learning: The college adopted continuous feedback and evaluation, thereby fostering sustainable improvement.
- Shared facilities: Both parties share facilities to provide mutual access to labs, workshops, and training centers for research and short-term training.
- Graduate engagement: Engaging graduates through project collaboration to enhance innovation and industrial competitiveness, while improving student skills through close cooperation.
- Research and development: Collaborating on research and development initiatives focused on relevant technical areas and practical problem-solving.

- Staff exchange: Continuing staff exchange programs to share technical expertise and enhance teaching quality.
- Joint project: Engaging in joint projects that involve both Belayab and KPC professionals and stakeholders.

Performance Summary

- Enrollment has increased to 1,735 from a baseline of 200.
- The enrollment of women students has reached 44, surpassing the short-term target of 40.
- Regional student enrollment has reached 10, relative to a baseline of zero.
- Graduate employment within six months after graduation is currently low because of temporary factors.
- The number of demand-driven programs that have been developed has reached 40, up from a baseline of 3, with both short-term and long-term options.
- The status of construction and equipment supply is progressing well, with a nearly 93 percent completion rate.
- The annual income generated by the RFTI has reached US\$4.1 million, relative to a baseline of zero.
- The number of signed MoUs has reached 16, up from a baseline of zero.
- Tracer studies are now conducted annually in a consistent manner.



KPC staff on industrial attachment



KPC staff on industrial attachment



Kenya Coast National Polytechnic, Kenya

Kenya Coast National Polytechnic (KCNP) partnered with African Marine & General Engineering Company Limited (AMGECO) to bridge the gap between academic training and industry needs in marine engineering. Before this partnership, KCNP had faced challenges such as limited industry exposure among trainers and students, difficulty in securing industrial attachments, outdated curricula, and a lack of structured collaboration with industry.

To address these issues, KCNP and AMGECO formalized their partnership through an MoU in April 2019. This agreement detailed clear roles, timelines, and activities and led to important developments, as follows:

- Industry-driven curriculum: AMGECO actively participated in developing and reviewing competency-based curricula to ensure alignment with current industry standards.
- Dual training model: KCNP and AMGECO implemented a dual-training approach that combined classroom instruction with practical industry training at AMGECO's facilities.
- Staff and student attachments: KCNP trainers and trainees completed industrial attachments at AMGECO, providing hands-on experience with and exposure to modern marine engineering practices.
- Career fairs and mentorship: AMGECO participated in KCNP's career fair and supported mentorship programs that increased women's participation in maritime courses.
- Graduate tracking: A structured system is used to track graduate employment, showing that up to 75 percent of trainees secured jobs within six months after graduation.

The benefits for KCNP:

- Five trainers completed industry attachments, updating their teaching and technical skills.
- Many trainees gained practical experience through attachments and dual training, improving their employability.
- AMGECO contributed to the review and development of four curricula.
- Career guidance from industry experts enhanced students' understanding of marine engineering pathways.
- Employment rates among graduates have risen above 75 percent because of industry-relevant training.

The benefits for AMGECO:

- Access to a well-trained talent pool for recruitment
- Enhanced corporate social responsibility profile through support for skill development
- Direct influence on training content to match workforce needs

The partnership, recognized as a model for public-private collaboration under EASTRIP, has modernized marine engineering training, improved employment outcomes, and promoted regional and gender inclusion in the maritime sector.



Marine Engineering trainees participating in mentorship programme facilitated by Industry Partners





Second phase of curriculum development: AMGECO is represented



Curriculum validation by the Industry Advisory Board



Stakeholder curriculum validation exercise



Boniface Omariba, a KCNP trainer, undertaking industrial attachment at AMGECO



KCNP trainees at AMGECO during an industry block training session (Dual Training Programme)





Performance Summary

- Enrollment has increased to 1,494 from a baseline of 73.
- Graduate employment within six months after graduation has reached more than 80 percent. The employment rate among women also rose, to 76.4 percent, relative to a baseline of 70 percent.
- A total of 11 demand-driven programs have been developed from a baseline of zero.
- The construction and supply of equipment are progressing well, currently at an 86 percent completion rate.
- The annual income generated by the RFTI has risen to US\$209,000 from a baseline of US\$86,000.
- The number of signed MoUs has reached 12, an increase from zero.
- Tracer studies are now being conducted annually and consistently.

National Institute for Transport (NIT), Tanzania

The MoU between NIT (Dar es Salaam) and Central Aviation Services (CAS) (Dodoma) was signed in January 2018 to facilitate collaboration in the following areas: (1) ab initio (that is, beginner) pilot training (part-time instructors and training equipment), (2) aircraft maintenance training (part-time instructors, student fieldwork, and training equipment), (3) safety and emergency procedure training, (4) maintenance of NIT training aircraft, and (5) exchange of other aviation-related training.

The partnership activities included conducting training and resource needs gap analyses, periodic reviews of activities, feedback collection, and adjustments to implementation strategies to ensure effectiveness and sustainability.

The benefits for NIT:

- Ongoing staff attachments
- Continued student attachments in aircraft



NIT Aircraft Assembled at Central Aviation Services

- maintenance engineering (AME)
- Participation of the CAS CEO as chair of the Industrial Advisory Committee
- Assembly of NIT aircraft
- Maintenance services for NIT aircraft

The benefits for CAS:

- Access to skilled and knowledgeable manpower
- Revenue from assembly and maintenance services
- Key position on the NIT Industrial Advisory Committee (IAC)



NIT Staff during industrial attachment at Central Aviation Services





Performance Summary

- Enrollment has increased to 14,086 from a baseline of 400.
- The number of enrolled women students is 4,214, up from a baseline of 283.
- Regional student enrollment has reached 88, relative to a baseline of zero.
- Graduate employment within six months after graduation has reached 71.2 percent, against a target of 75 percent. The employment rate among women is at 73 percent versus the target of 75 percent.
- The number of demand-driven programs that

have been developed has risen to 28 from a baseline of 4; 11 are classified as short term, and 17 as long term.

- Construction and equipment supply are progressing well, with completion near 98 percent.
- The annual income generated by the RFTI has reached US\$5.96 million, up from a baseline of US\$210,000.
- The number of MoUs has increased to 27, up from 7 at baseline.
- Tracer studies are being conducted annually in a consistent manner.

Meru National Polytechnic College, Kenya

Meru National Polytechnic (MNP) in Kenya has established a collaborative partnership with Perockstar Design & Construction Limited to bridge the gap between academic training and industry needs. The cooperation is formalized through a MoU that outlines joint efforts to enhance student learning and workforce development.

Key areas of collaboration under the MoU include the following:

- Industrial training: MNP trainees complete three-month industrial attachments at Perockstar construction sites, gaining hands-on experience with real projects and equipment. Trainers and technicians from the polytechnic also spend a month at the company to update their practical skills.
- Industry-aligned curriculum: Perockstar contributes to curriculum development, ensuring that MNP’s training programs reflect the latest trends and skills needed in the building sector. This alignment makes graduates more employable and minimizes training gaps at the company.
- Research and innovation: The partnership fosters joint research projects and technology transfers. For example, MNP’s academic expertise and Perockstar’s field experience have led to the adoption of

green building practices and innovative construction methods.

- Trainer development: Trainers participate in workshops and sessions led by Perockstar staff, while company experts provide guest lectures on specialized expertise, such as gypsum technology.
- Employment pathways: The MoU creates clear routes from internships to full-time employment for MNP graduates at Perockstar and enhances their prospects across the construction industry.
- Mutual benefits: The polytechnic gains by producing job-ready graduates and boosting its reputation, while Perockstar benefits from access to skilled labor, lower recruitment costs, and recognition for advancing youth skills and community development.



Perockstar Design & Construction Limited Design works



Distinct features of EASTRIP partnerships include the following:

- **Legal compliance:** Unlike traditional informal agreements, EASTRIP MoUs require adherence to donor policies and quality standards.
- **Inclusivity:** The MoUs include commitments to gender equity, environmental safeguards, and access among vulnerable groups, which are often absent in other partnerships.
- **Accountability:** Clear monitoring and reporting mechanisms ensure that both parties meet objectives and funding requirements.

This structured, practical approach benefits both the polytechnic and the industry partner. Through concrete examples, such as trainee industrial attachments, jointly developed curricula, and collaborative innovation, MNP and Perockstar have forged a model for effective education-industry partnerships in Kenya.

Performance Summary

- Enrollment has increased to 3,216 from a baseline of 1,000.
- Regional student enrollment has reached 152, up from a baseline of zero.
- Graduate employment within six months after graduation has reached 79 percent,

- against a target of 90 percent. The employment rate among women is at 88 percent, relative to a target of 95 percent.
- The number of demand-driven programs that have been developed has risen to 36 from an initial 5; 18 programs are short term, and 18 are long term.
- The status of construction and equipment supply is at 72 percent; construction is at 50 percent.
- The annual income generated by the RFTI has reached US\$870,000, up from US\$340,000 at baseline.
- The number of MoUs signed has increased to 21 from zero.
- Tracer studies are now being conducted annually in a consistent manner.



Meru National Polytechnic trainees during an industrial training session at Perockstar Limited

Kenya Institute of Highways and Building Technology, Kenya

The government of Kenya, through the Kenya Rural Roads Authority (KeRRA), with the support of the African Development Bank (AfDB) and the European Union (EU), is implementing the Arid and Semiarid Land (ASAL) Climate Proof Rural Roads Project in northern Kenya. The project aims to improve drought resilience by enhancing access to economic centers and building the technical skills of county staff and local contractors.

The Kenya Institute of Highways and Building Technology (KIHBT), part of the State Department for Roads, is a key training partner. KIHBT has a long history of training engineers, technicians, and contractors in road construction and maintenance. Through the project, KIHBT delivers professional training on labor-based road construction and maintenance to KeRRA staff, design consultants, and local contractors. At the start of the project, the management consultant assessed KIHBT's capacity to offer





high-quality, practical training and robust financial management.

A technical team, established through EASTRIP, created a cooperation agreement with KeRRA that defined roles and set a two-year timeline. KIHBT's contributions include offering staff attachments, internships, professional mentorships, community sensitization, and technical training in labor-based roadwork and environmental safeguards.

The main objectives are as follows:

- Strengthen managerial, administrative, and technical capacities in road planning, procurement, supervision, maintenance, and climate-proofing
- Enhance private sector participation and develop local contractor capacity using the local resource-based approach of the Roads 2000 Strategy
- Promote understanding among stakeholders about project goals to enhance implementation.

Most training occurs in Isiolo County, except for sessions requiring specialized equipment.

The ASAL training program began in September 2023 and was scheduled to last two years; the current cycle ends in September 2025. It is funded by the government of Kenya, EU, and AfDB, and coordinated with the management support consultant and the KeRRA regional director.

Key activities include the following:

- Curriculum development tailored to labor-based road construction and maintenance
- Classroom and hands-on training in road planning, supervision, and climate-resilient construction techniques
- Field demonstrations along demonstration road sections for practical learning
- Evaluating trainees through classwork and practical assessments: requires 75 percent attendance for certification
- Reporting with attendance records and evaluation outcomes

The benefits of the partnership are as follows:

- Four KIHBT trainers completed practical exposure in low-volume sealed (LVS) roads training and now independently deliver specialized training.
- Over 240 participants in six ASAL counties



KIHBT-industry practical engagements led to better rural roads



- have been trained and certified by KIHBT.
- Staff and trainees participate in internships, mentorships, and community awareness efforts, leading to better rural roads and increased resilience.

The program may be extended for three more years if additional funding is available, allowing more trainers to gain mentorship and practical skills in labor-based road construction using various surface technologies.

Performance Summary

- Enrollment has reached 5,018 against a target of 4,180.
- The number of women students enrolled is 818, surpassing the target of 670.
- Regional student enrollment has increased to 114 from a baseline of zero.

- Graduate employment within six months after graduation has risen to 77 percent, up from a baseline of 38 percent. The employment rate among women is at 72 percent, relative to a baseline of 31 percent.
- A total of 14 demand-driven programs have been developed, up from a baseline of zero, including short-term and long-term courses.
- The construction and supply of equipment are progressing well. The completion rate is at 98 percent.
- The annual income generated by the RFTI has reached US\$2.5 million, up from a baseline of US\$950,000.
- The number of signed MoUs has grown to 13 from a baseline of zero.
- Tracer studies are being conducted annually in a consistent manner.



KIHBT Trainers construct roads during industrial attachment.





Manufacturing

Federal TVET Institute, Ethiopia

MoUs were established in 2020 between the Federal TVET Institute and organizations such as the Metal Industry Development Institute (MIDI) and Makau Engineering Works PLC. Additionally, under the EASTRIP program, teachers from the institute participated in industrial attachments and experience-sharing sessions at the Manufacturing Technology and Engineering Industry Research and Development Center in Addis Ababa.

The primary objective of the Teacher’s Industry Attachment Program is to develop highly competent academic staff who can address real-world problems in classroom and community settings. The initiative also aims to foster collaborative research and to provide training and consultancy services to the industry.

Partnerships have been formed to achieve several key goals, as follows:

- Developing short- and long-term training and certification programs in the TVET sector for new and experienced tradespeople
- Preparing contextualized curricula tailored to specialized industries and selected industrial areas
- Facilitating the exchange of researchers, professionals, and technical experts
- Sharing information, teaching resources, laboratory and workshop facilities, and technological and scientific publications
- Establishing and utilizing joint laboratories, incubation centers, and workshops
- Collaborating to provide training among unemployed youth, with a focus on underprivileged individuals living near the training facilities
- Working together to cultivate a globally competitive workforce in the TVET sector
- Jointly pursuing project development and seeking new opportunities

- Creating market links for labor and facilitating access to finance for enterprise development
- Drafting joint action plans and schedules to ensure effective implementation of the MoU

The initial program was designed for teachers in the Manufacturing Technology Department. Industrial attachment experiences were organized to enhance the practical knowledge and skills of instructors by exposing instructors to diverse workplace scenarios. Formal letters were prepared, and meetings and discussions were held with TVTI management and staff to initiate the program.

For coordination, the assigned instructors reached out to company leaders at the Manufacturing Technology and Engineering Industry Research and Development Center in Addis Ababa to discuss experience-sharing opportunities. The leadership at the company welcomed these initiatives from the institute.

The program yielded significant benefits, including staff exchanges that promoted knowledgesharing. These industrial attachments substantially improved the knowledge, skills, and attitudes of teaching staff, thereby supporting the institute’s mission to deliver high-quality, industry-relevant education.

Performance Summary

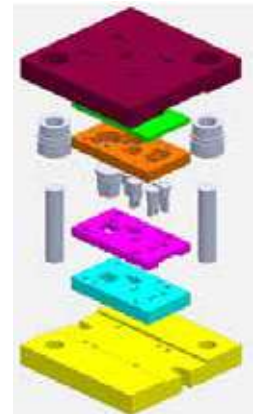
- Enrollment has increased to 5,172 from a baseline of 527.
- Women student enrollment has reached 1,192, surpassing the target of 887.
- Regional student enrollment has grown to 579 from a baseline of 1.
- Graduate employment within six months after graduation has achieved 100 percent, up from a baseline of 80 percent. The





employment rate among women also reached 100 percent from a baseline of 80 percent.

- The number of demand-driven programs that have been developed is now 51, up from a baseline of 4. This includes 38 short-term and 13 long-term programs.
- The construction and supply of equipment are progressing well. The completion rate is at 70 percent.
- The annual income generated by the RFTI has risen to US\$470,000 from a baseline of US\$20,000.
- The number of MoUs signed has increased to 48 from a baseline of 7.
- Tracer studies are being conducted annually in a consistent manner.



FTI Trainers doing a freehand sketch each Part and Designing using solid work software

Hawassa Polytechnic College, Ethiopia

Hawassa Polytechnic College (HPTC) in Ethiopia has forged partnerships with 36 local and international industrial concerns and institutions. The areas of cooperation were thoroughly identified and discussed before the MoU was signed. This collaborative effort ensured that the parties clearly understood their mutual goals and expectations, resulting in a win-win situation for everyone involved. The key aspects of this cooperation can be summarized as follows:

- Cooperative training programs in textiles and garments
- Jointly creating a demand-driven curriculum and practical training modules
- Facilitating job opportunities for TVET graduates
- Annual technical training and industry attachments for HPTC trainers
- Technical assistance in launching new programs and conducting labor market assessments and tracer studies
- Collaboration on market and human resource studies in textile and garment technology
- Support in developing a textile technology curriculum and teaching materials
- Staff and student exchanges
- Opportunities for RFTI student attachments

- Mutual academic staff visits for research, guest lecturing, benchmarking, and seminars
- Participation in academic meetings to share best practices
- Exchange of publications and academic resources
- Joint research, lectures, and symposiums
- Development of a textile products incubator and small and medium enterprise (SME) support in Ethiopia and Kenya
- Short- and mid-term staff training for partner companies and institutes
- Joint applications for project funding
- Facilitating technology transfers and providing consultancy services

HPTC established partnerships with industrial companies and institutions by following a step-by-step approach, as follows:

- Identifying relevant partners: Companies and institutions are chosen based on alignment with the college’s training goals.
- Defining goals: All parties discuss shared objectives and areas for collaboration.
- Signing agreements: An MoU formalizes responsibilities and commitments.
- Monitoring progress: Regular evaluation ensures that objectives are met and





improvements made.

- IAB: A board of representatives of the college and the industry guides ongoing collaboration.
- Workshops: Regular workshops help address challenges and refine programs.

The benefits of the partnerships are as follows:

- The curriculum is tailored to industry needs, keeping training relevant.
- Faculty teaching is enhanced through industry input and technical support.
- Students access internships and job placements, gaining real-world experience.
- Resource sharing, such as the sharing of training materials and facilities, lowers costs.
- Industry feedback helps update and refine college programs.
- The IAB ensures the partnership stays effective.
- Trainers receive ongoing professional development through technical attachments and training.
- Examples include designing a learning factory, setting up machinery, preparing and evaluating bids, and final installation, all of which are approved by the Ethiopian Textile

and Garment Research and Development Institute.

Performance Summary

- Enrollment has increased to 2,515 from a baseline of 503.
- The number of enrolled women is 1,002, surpassing the short-term target of 864.
- Regional student enrollment has grown from a baseline of zero to 37.
- Graduate employment within six months after graduation has reached 100 percent, up from a baseline of 65 percent. The employment rate among women is also at 100 percent, relative to a baseline of 70 percent.
- A total of 18 demand-driven programs have been developed from a baseline of 0; 10 are short term, and 8 are long term.
- The construction and supply of equipment are progressing well; the completion rate is currently at 86.4 percent.
- The annual income generated by the RFTI has risen to US\$130,000 from a baseline of US\$5,000.
- The number of signed MoUs has reached 32, an increase from zero.
- Tracer studies are now being conducted annually and consistently.



Holeta Polytechnic College during industrial training



Holeta Polytechnic College, Ethiopia

Holeta Polytechnic College (HPTC) has signed 25 MoUs with companies and institutions to enhance vocational training, boost graduate employment, and build capacity.

Through the MOU arrangement, HPTC has partnered with the following companies and institutions.

Industry partners

1. Sebeta Agro Industry Share Company
2. Elemtu Integrated Milk Industry
3. JINXIN Farm Industries
4. Garad Metals Engineering
5. Menagesh Integrated Organic Farm PLC
6. Berga Farmer Cooperative Union
7. Margin Par PLC
8. Metrolux PLC
9. Afran Global PLC
10. Hilina Food Processing Industry
11. Oli Tahe Construction
12. Alemiye Agri Integrated PLC
13. Bereket Bakery
14. Hawi and Fenet Construction Work PLC

Institutional partners

1. Institute of Ethiopian Standards
2. Ambo University
3. Holeta Bee Research Center
4. Holeta Livestock Development Center
5. Holeta Agricultural Research Center
6. Welmera Wereda Agriculture Office
7. Born Free Foundation
8. Lemi Gari Humanitarian Aid Organization
9. Yiyang Vocational and Technical College of China
10. Hunan Biological and Electrometrical Polytechnic of China
11. The Day Agro Industry PLC

Before the EASTRIP initiative, the college faced several challenges, such as a mismatch between training and industry needs, limited real-world exposure among trainees, low

industry involvement in curriculum design, and a lack of internship and job support programs. Establishing MoUs addressed these issues by aligning training with labor market demands and improving curriculum relevance.

Key partnership strategies at HPTC include the following:

- Industry mapping and outreach: Targeting key sectors, such as dairy, fruit and vegetable processing, and agroprocessing through visits and forums
- Customized MoUs: Clear deliverables for internships and alignment with national TVET policies
- Industry liaison office: Coordinating partnerships and serving as the main contact point
- Technical advisory boards: Gathering industry expert input on skill development
- Joint training and knowledge exchange: Training programs, exposure visits, and research projects with industry partners

The benefits of the partnerships include the following:

- Curriculum updated with input from industry trends and needs
- Workshops, guest lectures, and hands-on training by industry experts
- Student internships and site visits providing real-world experience
- Higher graduate employability because of relevant skill training
- Access to equipment, funding, and improved institutional reputation
- Collaborative research and innovation initiatives

Examples of partnership outcomes, include the following:

- Cooperative training at the Day Agro Industry PLC (December 2024)
- Teacher industrial attachment at Ethiopian





Food and Drug Authority (June 2024)

- Industry support for tool specification and bid evaluation (July 2025)

Key lessons of EASTRIP are as follows:

- Use data to tailor programs to market needs.
- Collaborate with industry, government, and communities to achieve relevance and gain resources.
- Keep curriculum flexible and aligned with real-world challenges.
- Monitor and evaluate effectively for steady improvement.
- Plan for long-term sustainability and local ownership.
- Encourage innovation and entrepreneurship.
- Engage with the community for broader social impact.

These steps have made HPTC programs more effective, relevant, and sustainable among students, employers, and the community.

Performance Summary

- Enrollment has increased to 5,664 from a

baseline of 50.

- The number of women students enrolled in short-term programs is 1,953, relative to the target of 275.
- Regional student enrollment has risen to 11 from a baseline of zero.
- The graduate employment rate within six months after graduation is 84.6 percent against a target of 98.0 percent. However, the employment rate among women graduates remains low and calls for additional support.
- There are now 81 demand-driven programs, close to the target of 82; 19 are short-term, and 61 are long-term programs.
- The construction and supply of equipment are progressing well, currently at an 89 percent completion rate.
- The annual income generated by the RFTI reached US\$120,000, up from a baseline of zero.
- The number of signed MoUs has reached 24, relative to a baseline of zero.
- Tracer studies are being conducted annually and consistently.



Teacher industrial attachment at Ethiopian Food and Drug Authority, June 2024



Kisumu National Polytechnic, Kenya

Kisumu National Polytechnic (TKNP) and EDUKANS Kenya partnered to enhance the quality, relevance, and market alignment of TVET. TKNP serves as an RFTI in textile technology, while EDUKANS specializes in demand-driven education and youth employability. Their collaboration aims to align training with labor market needs, foster innovation, and promote inclusive skill development in favor of Kenya's socioeconomic growth.

The partnership was formalized with an MoU signed in Kisumu on April 28, 2025. The MoU outlines joint initiatives in education, research, capacity building, and industry engagement, with a focus on inclusivity, gender equity, sustainability, and technology transfer.

Key objectives of the partnership are as follows:

- Address the skill gaps between TVET graduates and industry needs.
- Promote innovation in teaching and learning methods.
- Develop industry-linked curricula that integrate employability and entrepreneurship.
- Increase practical industry exposure among trainees and trainers.
- Strengthen the links between training and community development.

The areas in which TKNP and EDUKANS cooperate include the following:

- Demand-driven curriculum development
- Trainer exchange and professional development
- Student attachments, mentorship, and innovation challenges
- Applied research and knowledge sharing
- Joint employability and entrepreneurship programs
- Collaborative proposal writing and resource mobilization

The partnership process included the following outcomes:

- EDUKANS was identified as a partner aligned with TKNP's strategic goals.
- Objectives and expectations were defined, with clear minimum standards.
- Negotiation teams were formed, and a joint work plan was created.
- The MoU was drafted, reviewed, amended, and approved by both organizations.
- The MoU was signed on April 28, 2025.

The benefits for TKNP were as follows:

- Improved curriculum with the EDUKANS 7 Steps to Work methodology and digital pedagogy
- Expanded networks for industrial attachments and mentorship
- Trainer upskilling in learner-centered and innovative methods
- Joint applied research and access to international platforms
- Increased opportunities for resource mobilization

The benefits for EDUKANS were as follows:

- Access to TKNP's technical expertise and infrastructure
- More effective implementation of youth employability and entrepreneurship programs
- Greater visibility in Kenya's TVET sector
- Collaboration on green skills, circular economy, and digital education initiatives

Performance Summary

- Enrollment has reached 837, up from a baseline of 41.
- The number of women students is 721, surpassing the target of 628.
- Regional student enrollment has reached 75, up from a baseline of zero.
- Graduate employment within six months after graduation reached 82 percent, relative to a target of 90 percent; the employment





Newly constructed Regional Flagship TVET Institute in Textile Technology at Kisumu National Polytechnic College.

rate among women reached 79 percent, also against the target of 90 percent.

- The number of demand-driven programs that have been developed is now 29, up from a baseline of 2; of these, 12 are short-term, and 17 are long-term programs.
- The construction and supply of equipment are progressing well; the completion rate is

at about 98 percent.

- The annual income generated by the RFTI has reached US\$35,000, up from a baseline of zero.
- The number of MoUs signed has reached 21, up from a baseline of zero.
- Tracer studies continue to be conducted annually in a consistent manner.



Students at Kisumu National Polytechnic College during a training session.



Dar es Salaam Institute of Technology, Mwanza Campus, Tanzania

The Dar es Salaam Institute of Technology (DIT) and the Kilimanjaro International Leather Company Limited (KLICL) entered into an MoU in August 2021. The agreement, set for five years with a renewal option, aims to foster a long-term collaborative partnership between the two organizations. The main goal is to promote mutual growth and advancement in Tanzania's leather industry through coordinated efforts in training, technology transfer, and capacity building.

The MoU serves as a model for linking the country's academic institutions with industry. It specifically targets the revitalization of the leather sector. The local leather industry has faced significant challenges, including outdated technology and the production of lower-quality leather. Simultaneously, KLICL required skilled technical personnel to operate its nearly completed facilities, while DIT sought opportunities to enhance practical skills for

its staff and students across the leather value chain.

Recognizing each party's distinct strengths, DIT and KLICL agreed to collaborate to address existing skill gaps and operational needs. DIT is committed to providing the technical knowledge and expertise necessary to improve KLICL's production activities. In return, KLICL offered its facilities and professional training resources to DIT.

This partnership has already yielded several tangible outcomes, as follows:

- DIT conducted a short-course training program for KLICL employees, focusing on practical skills enhancement.
- KLICL provided industrial attachment opportunities for DIT staff and for students, including placements for five academic staff from the DIT Mwanza campus.
- DIT contributed its expertise in mechanical



DIT Mwanza Campus students engaging in practical training at the leather products manufacturing workshop.





and electrical engineering during the installation, testing, and commissioning of leather processing equipment at KLICL.

- KLICL shared its operational experience with machinery during the development of technical specifications for the new heavy leather equipment to be procured by DIT.

Most collaborative activities of the initial phase have been successfully completed. However, for the next phase, both parties are encouraged to explore the area of leather processing, which was not extensively addressed previously. This focus is particularly important because both organizations will soon operate their own tanneries, creating new opportunities for mutual benefit and industry progress.

Performance Summary

- Enrollment has increased to 3,224 from a baseline of 81.
- Regional student enrollment has reached 233, up from a baseline of zero.
- Graduate employment within six months

after graduation has reached 79 percent, against a target of 80 percent.

- A total of 15 demand-driven programs have been developed from a baseline of zero; 8 are short term, and 7 are long term.
- The annual income generated by the RFTI now stands at US\$130,000, up from zero.
- The number of MoUs signed has reached 11, relative to a baseline of 1.
- Tracer studies are now being conducted annually in a consistent manner.



DIT Instructors during the 49th Dar es Salaam International Trade Fair in Dar es Salaam



Industry Advisory Committee members touring the newly built Leather products workshop



Power and Energy

General Wingate Polytechnic College, Ethiopia

The partnership between Puratos Food Industries Share Company and General Wingate Polytechnic College (GWPTC) shows how industry-led training can boost employability, reduce drop-out rates, and support economic growth.

Ethiopia's TVET sector faces several issues, including outdated equipment, limited exposure to industry standards, and trainers who lack practical experience. These challenges have led to high drop-out rates and low graduate employability because training often does not match industry needs.



Launching Ceremony of Puratos Ethiopia Bakery School & café

the college.

To address these gaps, GWPTC partnered with Puratos Ethiopia Food Industries, a company specializing in high-quality bakery, patisserie, and chocolate raw materials. The agreement, signed in August 2024, established the Puratos Ethiopia Bakery School on the GWPTC campus. The school provides youth with diploma-level vocational training in bakery and patisserie, encourages entrepreneurship, and contributes to the local economy.

- All professional baking equipment and tools are supplied and installed by Puratos.
- Two full-time professional trainers are employed. Salaries and benefits are covered by Puratos.
- Selected competitively from underprivileged communities, 25 trainees completed Level I courses and received lunch and transport allowances through the initiative.
- A bakery and pastry café that is operated on campus supplies 100 cakes daily (produced by students) to the college café. The café is owned by GWPTC, and its income supports

The key benefits for GWPTC and trainees are as follows:

- Trainees have access to modern bakery and pastry training facilities.
- International-level vocational education is integrated into the college curriculum.
- Students work in real production settings, thereby strengthening their technical skills.
- The program increases student interest and engagement because of the quality of the training.
- Trainees gain practical skills that match labor market demand.
- Drop-out rates decline as trainees understand the career growth opportunities.
- Support is provided through stipends and meals.
- The program enables joint certification with a global company.
- Modern equipment and skilled trainers close resource gaps at the college.
- The bakery school generates income through cake sales.
- Skills and knowledge transfers benefit the





Trainees at theoretical classes



Training lab equipment- 2 supplied to Puratos Ethiopia bakery school

Benefits for Puratos Ethiopia:

- The curriculum promotes Puratos products and develops a skilled workforce for Puratos and partner companies.
- Training provides a real environment for product testing and the collection of feedback.
- The partnership supports youth development, economic inclusion, and social impact.
- Costs are reduced because the college provides facilities and support.
- The program acts as a recruitment pipeline, allowing Puratos to evaluate and hire well-trained graduates.

The collaboration between Puratos Food Industry and GWPTC demonstrates how industry-led, privately owned TVET training can effectively address gaps in public education. The model delivers measurable benefits for both trainees and industry, highlighting the value of practical, market-driven training and strong partnerships. It stands as a model for other actors who are aiming to create effective, industry-responsive training ecosystems that promote skill development and broader transformation within sectors and regions.

Performance Summary

- Enrollment has increased to 2,277 from a baseline of 251.
- Women student enrollment stands at 77, relative to the target of 90 in short-term programs.



Training lab equipment- 3 supplied to Puratos Ethiopia bakery school

- Regional student enrollment has reached 126 from a baseline of zero.
- Graduate employment six months after graduation is now at 90 percent, against a target of 96 percent; the employment rate among women is at 94 percent relative to the target of 92 percent.
- The number of demand-driven programs that have been developed has risen to 22 from a baseline of 6, including 6 short-term and 16 long-term programs.
- Construction and equipment supply are progressing well and are currently at 73 percent.
- The annual income generated by the RFTI has reached US\$620,000, up from a baseline of zero.
- The number of MoUs signed has reached 23, relative to a baseline of zero.
- Tracer studies are conducted annually in a consistent manner.



KenGen Geothermal Training Center, Kenya

The KenGen Geothermal Training Center (KenGen GTC) in Kenya plays a crucial role in advancing geothermal resource exploration and development nationally and across Africa. Since 2010, KenGen GTC has maintained a strategic partnership with the Geothermal Development Company (GDC), renewed in 2021 through a collaboration framework agreement. The partnership aims to strengthen geothermal expertise, capacity building, and consultancy services.

Through collaborations with organizations, such as the United Nations Educational, Scientific, and Cultural Organization (UNESCO) GRÓ Geothermal Training Program (GTP) and the Africa Geothermal Center of Excellence (AGCE), KenGen GTC offers professional short courses focused on geothermal resource exploration, development, and utilization. These training initiatives have attracted participants from 16 African countries, thereby fostering regional integration and enhancing skills in renewable energy.

A flagship offering is the annual Sustainable Development Goals (SDG) Short Course, jointly organized since 2016 by KenGen GTC, GDC, and UNESCO GRÓ. The program builds on the earlier Millennium Development Goals Short Courses (2006–15). Over 1,000 trainees from Kenya and the broader region have benefited from these courses, which feature a blend of fieldwork, lectures, practical exercises, and site visits.

KenGen GTC's ongoing efforts have positioned it as a leading center for geothermal knowledge-sharing that supports the growth of geothermal capacity and the achievement of sustainable development goals in Africa.

Sustainable Development Goals Short Course VII: Overview

KenGen GTC, in partnership with UNESCO GRÓ GTP and GDC, delivered the 7th SDG Short Course on Geothermal Resource Exploration and Development from November 13 to December 4, 2023. This program combined six days of fieldwork at Lake Bogoria with 14 days of lectures, practical exercises, and site visits at the Olkaria geothermal sites.

Forty-four participants from 11 African countries—the Comoros, Djibouti, Ethiopia, Kenya, Malawi, Morocco, Nigeria, Rwanda, Tanzania, Uganda, and Zambia—attended the course. The curriculum covered core topics in geology, geophysics, geochemistry, drilling, reservoir engineering, environmental management, and project economics as they relate to geothermal development.

In line with the global attention on renewable energy to address climate change, this annual training exercise strengthens regional expertise and networks, equipping professionals to advance geothermal projects in their home countries. The SDG Short Course series continues to play a vital role in building capacity in geothermal development and supporting sustainable energy goals across Africa.



Trainees on a field demonstration in Olkaria Fumaroles



Africa Geothermal Center of Excellence Training Program

At the first Steering Committee Meeting of AGCE in March 2016, held in Kigali, Rwanda, KenGen GTC and GDC agreed to partner in offering capacity building programs through AGCE. The United Nations Environment Programme (UNEP) provided technical support and developed an interim project strategy to move AGCE toward full operational status. During this interim phase, AGCE prioritized demand-driven training services for African countries, with the support of KenGen GTC and GDC.

From 2016 to 2023, KenGen GTC and GDC have worked to strengthen capacity and skills for geothermal development and utilization, helping to accelerate geothermal projects across Africa for power generation and direct use applications.

One such training initiative was the Geothermal Science and Technology Training Program. Part 1 (11 days) was held at GDC, while Part 2 (11 days), which was focused on energy status and regulation in Kenya, was hosted by KenGen GTC at the Olkaria premises and delivered by KenGen GTC trainers to staff of the Ethiopia Energy Authority (EEA). This training course was coordinated by AGCE and sponsored by UNEP. Nine EEA staff members completed the 22-day program.

These initiatives have promoted regional integration and enhanced the visibility of KenGen GTC, while also building networks with other institutions. This has led to an increase in trainee enrollment and additional consultancy opportunities.

Performance Summary

- Enrollment has reached 444, surpassing the target of 370.
- The enrollment of women stands at 138, exceeding the target of 70.
- Regional student enrollment has increased to 218 from a baseline of 30.
- The graduate employment rate six months after graduation is 82 percent, relative to the target of 89 percent.
- The employment rate among women is 75 percent, relative to the target of 82 percent.
- A total of 24 demand-driven programs have been developed, up from a baseline of zero. This includes 17 short-term programs and 7 long-term programs.
- The construction and supply of equipment are progressing well; the completion rate is nearly 97 percent.
- The annual income generated by the RFTI has risen to US\$1.59 million, up from a baseline of US\$90,000.
- The number of MoUs signed has reached 19, relative to a baseline of 7.



EEP staff training at KenGen GTC premises



Arusha Technical College, Tanzania



The establishment of Solar Training Center at ATC

Arusha Technical College (ATC), Tanzania, entered into an MoU with the Tanzania Renewable Energy Association (TAREA) in 2019. This collaboration focuses on the establishment and operation of a Renewable Energy Skills Training Center. The main objectives include developing industry-driven curricula, facilitating staff exchanges and capacity development, promoting workplace-based practical learning, and engaging in applied research and development.

Under the partnership, TAREA has played a pivotal role in connecting ATC with a range of renewable energy stakeholders, including private companies, government institutions,

and industries domestically and internationally.

The MoU's key activities have been implemented with the active participation and support of the development partners. TAREA has contributed to the identification of training needs, while ATC has provided the necessary facilities for hosting the Skills Training Center. Together, both parties work closely to establish this center of excellence.

Industrial attachment opportunities for teaching staff in renewable energy industries have been a significant outcome of the partnership, allowing ATC staff to gain practical experience and enhance their skills.



ATC Staff on industrial attachment



ATC Staff on industrial attachment





The collaboration has resulted in the development of curricula for long-term programs in renewable energy, including the following:

- A bachelor's degree in renewable energy
- An ordinary diploma in electrical and solar energy engineering
- An ordinary diploma in electrical and wind energy engineering
- An ordinary diploma in electrical and hydropower engineering

Vocational training programmes have been introduced in solar energy, bioenergy, and wind energy, thereby supporting the skill development necessary for Tanzania's priority sectors.

Performance Summary

- Enrollment has reached 1,406, up from a baseline of 74.
- The enrollment among women stands at 242, meeting the target of 240.

- Regional student enrollment is now 140, relative to a baseline of zero.
- Graduate employment six months after graduation has reached 68.2 percent, against a target of 75.0 percent. The employment rate among women is 67.3 percent, exceeding the target of 60.0 percent.
- The number of demand-driven programs that have been developed has increased to 27 from a baseline of 3, including 15 short-term and 12 long-term programs.
- Construction and equipment supply are progressing well; the completion rate is nearly 90 percent.
- The annual income generated by the RFTI has reached US\$550,000, up from a baseline of US\$28,000.
- The number of MoUs signed has risen to 17, relative to a baseline of 1.
- Tracer studies are now conducted annually in a consistent manner.



A student at Arusha Technical College in a practical session.



ICT

Dar es Salaam Institute of Technology, Dar es Salaam Campus, Tanzania

The Dar es Salaam Institute of Technology (DIT RAFIC) in Tanzania signed an MoU with Chongqing Vocational Institute of Engineering (CQVIE), China, in December 2022. The partnership aims to strengthen skill development and industrial connections through a structured student exchange among civil engineering students engaged in a four-year bachelor of engineering degree program. Through the exchange, students spend their first and fourth years at DIT RAFIC and their second and third years at CQVIE.

The main goal is to provide Tanzanian students with access to advanced industrial training and global exposure, thus addressing challenges such as limited experience with modern equipment and international collaboration. CQVIE's expertise helps bridge these gaps and supports EASTRIP's goal of improving industrial links.

The methodology for implementing this MoU has involved a multistep process, as follows:

- Negotiation and signing: DIT RAFIC and CQVIE coordinated by way of meetings and secured government approval to formalize the partnership.
- Student selection: DIT RAFIC selected bachelor of engineering–civil engineering students based on academic performance, English proficiency, and readiness for study in China. Preparation included cultural orientation.
- Program execution: The first cohort of 30 students spent year one at DIT RAFIC, years two and three at CQVIE (with theory and industrial training), and the final year back at DIT RAFIC for their graduation project.



MoU signing ceremony between DIT RAFIC and CQVIE

- Monitoring: Both institutions held regular reports and virtual meetings to evaluate progress and address challenges.

The partnership has yielded various benefits.

For DIT RAFIC:

- Graduates gain advanced skills and international certificates, thereby improving their job prospects.
- DIT RAFIC faculty benefits from workshops on modern teaching methods.
- DIT RAFIC's international profile is raised, attracting additional partnerships and funding.

For CQVIE:

- Tanzanian students enrich campus diversity and group work.
- CQVIE strengthens its African TVET connections, enabling joint research and staff exchanges.
- Insights from Tanzanian students on local engineering challenges, such as sustainable energy, inform CQVIE's curriculum updates.





Building on the success of the student exchange program, DIT RAFIC and CQVIE plan to expand their cooperation in the following ways:

- Increase the number of student exchanges beyond 30 per year and allow short-term visits for Chinese students to DIT RAFIC.
- Launch joint research projects and publications between DIT RAFIC and CQVIE staff.
- Form partnerships with Chinese and Tanzanian companies for student internships and apprenticeships.

Performance Summary

- Enrollment has risen to 7,941 from a baseline of 896.
- The number of women students enrolled is 2,172, surpassing the target of 950.
- Regional student enrollment has increased

to 97 from an initial baseline of zero.

- The graduate employment rate six months after graduation has reached 78 percent, only slightly shy of the target of 79 percent; the employment rate among women is 67 percent relative to the 79 percent target.
- The number of demand-driven programs that have been developed has grown to 46 from a baseline of 2. All programs are long term.
- Construction and equipment supply are progressing well; the completion rate is nearing 97 percent.
- The annual income generated by the RFTI has reached US\$180,000, up from a baseline of US\$170,000.
- The number of MoUs signed has reached 15, relative to only 1 at baseline.
- Tracer studies are being conducted annually in a consistent manner.



Farewell Ceremony for 30 DIT Students embarking on studies at CQVIE



Tourism

Tourism Training Institute, Ethiopia

Ethiopia's tourism and hospitality industry is crucial for job creation, economic growth, and wealth distribution. The Tourism Training Institute (TTI) recognizes the importance of strong partnerships with the industry to reduce skills gaps, enhance program relevance, and ensure sustainable sectoral growth. As part of this effort, TTI has signed multiple MoUs with key industry stakeholders.

These agreements outline collaboration in areas such as the following:

- Aligning curricula with industry needs
- Industrial attachments for staff and cooperative training for trainees
- Collaborative research and innovation
- Capacity building among practitioners and trainers
- Industry-driven certification support
- Job placement and employment facilitation for graduates

The goal is to foster a mutually beneficial partnership, giving both the institute and the industry access to a qualified workforce with up-to-date skills.

Collaboration between TTI and the industry offers significant advantages for both parties, especially under the EASTRIP framework, as follows:

- **Industry-aligned curriculum:** Industry partners help TTI keep training programs relevant and current. For example, organizations such as the Ethiopian Chefs Association, the Ethiopian Hotel Professionals Association, and the Ethiopian Tour Guide Professionals Association participate in curriculum reviews.
- **Improved graduate employability:** Cooperative training and industry attachments give students practical skills for the job market. Haile Grand Hotel and

Boston Partners (Kuriftu Resort and Spa) have actively supported TTI graduates through recruitment and capacity-building initiatives.

- **Faculty development:** Trainers benefit from workshops and attachments at leading workplaces. Notably, Sheraton Addis has recently increased its involvement in faculty upskilling.
- **Access to equipment and facilities:** Industry donations enhance learning. Hilton Addis has provided training facilities and equipment, while the Entrepreneurship Development Institute (EDI) has contributed resources and staff training.
- **Enhanced reputation:** TTI's close industry ties boost its credibility and attract more students. Graduates serve as ambassadors, strengthening the institute's reputation. For instance, renowned chefs who studied at TTI now testify to its impact.

The benefits to industry partners include the following:

- **Access to competent graduates:** TTI supplies job-ready graduates, reducing recruitment time and costs. Industry acceptance rates for TTI alumni are among the highest.
- **Influence on training quality:** Partners help design curriculum to fit business needs.
- **Reduced recruitment gaps:** Cooperative training allows the early identification of future employees, making hiring smoother and more cost-effective.
- **Innovation and research support:** Joint projects generate new solutions to industry challenges, for example, ongoing collaborative studies on Ethiopian food and beverages.
- **Corporate social responsibility:** Workforce development participation supports national goals and company corporate social responsibility profiles.





The shared benefits are as follows:

- Stronger public-private partnerships: The collaboration supports national tourism and regional integration under EASTRIP.
- Higher service quality: Joint training raises standards in tourism and hospitality.
- Sustainable growth: Well-trained staff help drive responsible tourism development.

Recommendations to Sustain and Enhance Partnerships

- Institutionalize collaboration: Establish permanent IABs, such as the Technical IAB, and strengthen communication structures for long-term engagement.
- Allocate dedicated resources: TTI and industry should assign staff and funding to partnership activities. Seek collaborative funding opportunities.
- Regular curriculum reviews: Continually update programs to match industry changes.
- Expand cooperation: Broaden collaboration in new fields, such as bartending, ecotourism, and digital travel platforms. Consider multipartner agreements with hotels, tour operators, and tourism organizations.

- Centralized database: Develop a digital system to track student placements and graduate employment. TTI is working with Ethio-Telecom to set up a data base center.
- Promote knowledge sharing and innovation: Host seminars and joint research projects. TTI collaborates with several universities and recently signed an MoU with Tanzania’s National College of Tourism.
- Measure and report results: Use clear metrics such as employer satisfaction and employment rates. Integrate tracer studies as part of TTI’s annual planning and share success stories within the EASTRIP network.

Performance Summary

- Enrollment has reached 2,085, surpassing the target of 695.
- Enrollment among women stands at 1,335, relative to the target of 867.
- Graduate employment within six months after graduation has risen to 82 percent from a baseline of 70 percent; the employment rate among women has reached 87.2 percent, up from 75.0 percent.
- The number of demand-driven programs



Chefs who graduated from TTI



that have been developed has increased to 36 from a baseline of 11, comprising 23 short-term and 13 long-term programs.

- The annual income generated by the RFTI has reached US\$650,000, up from a baseline of

US\$20,000.

- The number of signed MoUs has grown to 31 from a baseline of zero.



TII-industry links for high-quality training





3. Comparative Summary of EASTRIP Initiative Partnership vs Traditional Partnerships

The traditional approach to the development and purpose of partnerships is informal and ad hoc, typically limited to one-time internship opportunities. In contrast, EASTRIP's structured partnerships are long term and purposeful and based on comprehensive needs analysis and deep involvement in curriculum development, training delivery, and certification processes. Cooperative training in traditional industry partnerships is generally limited. In contrast, EASTRIP offers enhanced cooperative training opportunities for trainees and trainers, ensuring a more comprehensive and practical learning experience. Regular follow-up mechanisms have been established, involving IAB members from the outset.

The traditional approach to Regarding feedback provision and implementation tracking avoids systematic progress tracking, feedback collection, and the integration of feedback for continuous improvement. In the EASTRIP model, strong follow-up procedures are institutionalized through MoUs and the involvement of the IABs. This system ensures control over the entire TVET delivery value chain, including tracer studies and beneficiary satisfaction surveys to monitor graduate employment status and inform improvement efforts.

The scope of activities in traditional partnerships tends to be limited and mainly focused on training assignments. EASTRIP's approach, meanwhile, encompasses a broader range of activities, including staff attachment and exchange programs, training of trainers (ToT), and benchmarking visits to facilitate knowledge transfer and the adoption of best practices.

In connection with the above, the ATC industry liaison officer stated as follows:

The Tanzania Renewable Energy Association (TAREA) was registered in 2001, aimed at

promoting sustainable development of Renewable Energy and Energy Efficiency Technologies through managing knowledge and information dissemination, networking public and private renewable energy and energy efficiency stakeholders, and promotion of institutional capacity building.

In 2018, ATC was selected to develop a Regional Flagship TVET institute in Renewable Energy through EASTRIP. One of the DLIs for EASTRIP was ATC to sign MoUs with industries and partner institutions. On the other hand, TAREA was finding training institutions in renewable energy to collaborate in achieving its objectives. This initiated the signing of the MoU between ATC and TAREA, and the Executive Secretary of TAREA was appointed as the Chairperson of the EASTRIP Industry Advisory Board. The key beneficiaries involved the staff of both ATC and TAREA, students of ATC and from other regions of Tanzania through short-term professional training and long-term training and renewable energy stakeholders.

Traditional partnerships with industries rely heavily on personal relationships rather than institutional frameworks. Through EASTRIP, partnerships have become institutionally embedded by establishing IABs and industry liaison officers, thereby ensuring sustainable and consistent engagement. Traditional partnerships generally lack structured and consistent industry support mechanisms, whereas the EASTRIP approach provides technical support through the program and fosters a collaborative and resource-efficient environment.

Traditional approaches to internship duration and scope offer only brief exposure—often only a few days or weeks—for trainees and rarely provide opportunities for trainers. EASTRIP, however, requires at least one month





of industrial attachment among trainers and instructors, alongside a flexible internship duration for trainees to accommodate diverse learning needs and industry requirements.

An industry liaison officer from one of the RFTIs commented as follows:

The partnerships focused on measurable outcomes whereby each institution is required to prepare a work plan for the implementation of the activities stated in the MoU. The implementation of the MoU activities was monitored by the National Project Coordination Units and IUCEA. The partnerships included industrial attachment of teaching staff, staff exchange and curriculum development to ensure TVET institutions are aligned with the needs of the industry.

These areas were not highly considered in traditional approaches. The EASTRIP facilitated the financing of the implementation of the partnership activities, such as teaching staff, staff exchange, curriculum development and capacity building. The EASTRIP also made it possible for the implementation of partnership activities through investment in training facilities and equipment.

Partnerships with industries have greatly contributed to creating a better environment for TVET development at the national level through active participation in national TVET development policy and capacity-building initiatives. Industry engagement has also significantly promoted regional integration.

Private sector representatives participate in regional initiatives, such as the development of regional TVET qualifications frameworks, policy frameworks for TVET integration, harmonized occupational standards, and regional frameworks for occupational competency assessment and certification. Industries have also been involved in regional forums, benchmarking, and coordination activities, including project governance at both the national and regional levels.

Key success factors for partnerships between TVET institutions and industries include not only adequate funding, but also mutual benefits (clear value for both parties), strong communication (open, regular dialogue), shared ownership (joint responsibility for goals), trust and commitment (reliable collaboration), and clear expectations (well-defined roles and responsibilities).

These elements foster a sustainable relationship that goes beyond financial support, driving innovation, relevance, and long-term success. Strong institutional leadership and commitment are central to the effectiveness of these partnerships. Management prioritizes the signing and implementation of MoUs, monitors partnership performance, and ensures collaboration with industries and institutions. The strategic focus of RFTIs on becoming centers of excellence has attracted interest from industries and partner institutions, aligning partnership efforts with national and regional development priorities.





4. Conclusion and Recommendations

RFTIs have demonstrated that the TVET-industry partnerships initiated by EASTRIP have contributed significantly to the ability of institutions to achieve their core functions of teaching and learning, with a notable impact on producing a highly skilled and relevant workforce and furthering socioeconomic development in the project's beneficiary countries. These partnerships have played a practical role in bringing stakeholders together to develop relevant policies, occupational standards, and curricula and syllabi and to facilitate industrial attachments among trainers, solve industry problems through technology transfers, and promote regional integration by participating actively in multiple regional initiatives.

Key recommendations from these partnership experiences focus on tightening loose ends, reinforcing institutionalization, and ensuring sustainability. The practice of defining mutual needs and implementation approaches through MoUs should continue, with deeper technical

collaboration and alignment on sectoral needs. Partnerships should also be expanded to the regional, continental, and international levels, involving bilateral, but also multilateral engagements. Biannual or annual joint review forums among parties should be institutionalized to strengthen monitoring, evaluation, and continuous improvement.

The focus of partnerships should remain, but not be limited to the following areas: co-creating or revising curricula, facilitating the expansion of experiential learning (increasing opportunities for cooperative training, internships, apprenticeships, and industry-led projects), skill upgrading, reskilling, upskilling, micro credentials, recognition of prior learning through robust assessment and certification, technology transfers, resource sharing, joint research and innovation for problem-solving, graduate placement support, and governance for improvement.

Annex 1. Component 2- Achievements at National Levels (Ethiopia, Kenya and Tanzania)

- A total of 105 occupational standards have been developed across the three countries, up from a baseline of zero.
- The number of curricula revised or developed has reached 270, also from a baseline of zero.
- Additionally, 204 TVET qualifications are now mutually and regionally recognized, laying a strong foundation for the smooth mobility of certified and skilled individuals in the region.
- All three countries have developed TVET financing strategies and have begun implementing them.
- Ethiopia has established a TVET quality assurance organization (ETA) and independent bodies for occupational competency assessment and certification.
- Kenya is currently conducting a skills mapping exercise.
- Tanzania has developed a national strategic plan for TVET development.



Annex 2. Component 3 – Achievements by Regional Component (RFU)

- The Harmonized Regional TVET Qualifications Framework for Ethiopia, Kenya, and Tanzania (RTQF-EKT) has been developed and adopted by the three countries, and its implementation is currently underway.
- Forty-four (44) Occupational Standards have been harmonized and are being implemented.
- A Regional Framework for Occupational Competency Assessment and Certification has been developed and adopted.
- A Regional Policy Framework for TVET Integration has been developed and adopted.
- Sensitization and dissemination of the regional documents have been carried out.
- The proposal for the establishment of a regional TVET coordination unit has been submitted, and the respective committees and council of ministers have reviewed it, although a final decision has not yet been made.
- Independent verification of DLIs/Rs for NPCUs and RFTIs has been successfully facilitated for five consecutive rounds.
- An independent beneficiary satisfaction survey has been successfully coordinated for four consecutive rounds.
- An Implementation Strategy for Regional Student Enrollment and Staff Exchange among RFTIs has been developed and implemented.
- Technical support was provided to NPCUs and RFTIs in the development of guidelines for staff and student mobility.
- Technical support was provided to NPCU Tanzania to develop a TVET Financing Strategy for Tanzania.
- Technical support was given to the three countries in construction to fill the capacity gap of project implementation teams.
- Intensive capacity-building training was provided to NPCU and RFTI PIU staff, benefiting more than 82 staff members.
- Capacity-building training was provided to more than 160 TVET teachers and management in partnership with GTC.
- Special Leadership and Management Training for vocational managers in Ethiopia, Kenya, and Tanzania was conducted in collaboration with Guangzhou Technician College.
- Three cohorts (57 students) of the EASTRIP-China Scholarship were managed, and 20 trainers were selected for the fourth cohort.
- The EASTRIP project monitoring system, including the Grievance Redress Mechanism (GRM), was developed.
- Onsite project monitoring and support missions were conducted.
- Nine TAMs and RSC meetings were successfully held.
- A Regional Strategic Framework for Green TVET has been developed.





EASTRIP

Skills for Transformation & Regional Integration



WORLD BANK GROUP

Inter-University Council for East Africa
Plot M833 Kigobe Road,
PO Box 7110, Kampala, Uganda

E-mail: eastrip@iucea.org

Tel: +256414256251

www.eastrip.iucea.org