PROGRESS REPORT

Empowering Tanzanian Youth through Enhanced Technical Training at Don Bosco KIITEC, Arusha, Tanzania.

June 2024

June 2024

EXECUTIVE SUMMARY

This quarterly narrative report, prepared by the Don Bosco Planning and Development Office (PDO) in collaboration with KIITEC, outlines the activities and progress achieved during the first three months of the 13-month "Empowering Tanzanian Youth through Enhanced Technical Training at Don Bosco KIITEC, Arusha, Tanzania" project. As part of the donor agreement, the PDO commits to providing comprehensive narrative and financial reports each quarter to ensure transparency and facilitate subsequent funding transfers. This project aims to enhance the quality of education and infrastructure at KIITEC, focusing on expanding technological capabilities, improving training facilities, and fostering sustainable income-generating activities.

Significant advancements have been made in several key areas during this reporting period. The computer lab has been upgraded with state-of-the-art equipment, which has already begun to enhance the learning experience for students, aligning with the goal of providing hands-on training that meets industry standards. Additionally, crucial capacity-building programs for teachers have been initiated, ensuring they receive ongoing professional development to stay current in both technical skills and pedagogical methodologies. Notably, one teacher attended a high-performance computing workshop at the Nelson Mandela African Institution of Science and Technology, while the school dean and admission officer participated in a NACTEVET training session focused on student applications and exam standardizations.

Furthermore, strides have been made in expanding the mini-grid solar system. The outdated batteries were replaced with new, high-capacity lithium-ion batteries, significantly improving the efficiency and reliability of the energy supply. This upgrade is essential for the seamless operation of the school's administrative functions, classrooms, and workshops. The old batteries have also been repurposed for use in the innovation hub, providing valuable learning resources for students.

Efforts to establish sustainable income-generating activities have also shown promising results, despite encountering challenges. The carpentry and joinery production unit, initially set up to meet the institution's needs, has attracted external customers, generating additional revenue. Building on this success, a welding production unit has been established, further diversifying income streams and providing practical training opportunities for students. Despite challenges such as delays in receiving wood materials and budget shortfalls due to inflation, these obstacles have been effectively managed, ensuring continued progress toward project goals.

The accomplishments of this quarter lay a solid foundation for the future phases of the project. With continued support and strategic investment, there is confidence in the ability to enhance KIITEC's educational environment, ensure its financial sustainability, and achieve the overarching objectives of this project

CONTENTS:

SECTION ONE: INTRODUCTION

1.1. DON BOSCO KILIMANJARO INTERNATIONAL INSTITUTE FOR TELECOMMUNICATIONS, ELECTRONICS AND COMPUTERS (DBKIITEC):

Don Bosco KIITEC[1] is a private Technical College registered by NACTVET (REG/EOS/027. The institution is located in Arusha-Moshono along the Nelson Mandela Road next to the famous Masai Camp.

The institution's journey began in 2004 when Mr. Francis Brochon, a visionary French engineer, established this institution with a noble mission. His aim was to contribute to Tanzania's technological advancement by empowering underprivileged youth with essential technical knowledge and skills for sustainable livelihoods. The institutions' primary focus has been to educate and nurture technicians in cutting-edge fields such as electronics, telecommunications, and computer engineering, thereby supporting the nation's industrial progress. Over the years, DBKIITEC has expanded its offerings to include Ordinary Diploma programs in Electronics and Telecommunications, and subsequently, introduced programs in industrial automation and renewable energy in 2011.

Since its inception, the institution has been receiving steadfast financial and operational support from two NGOs (the Foundation for Technical Education (FTE) and Action Development Education International (ADEI)). However, in 2019, due to the advancing age of the founders, they were looking for successors to take over the operation of the institute. Recognizing the Salesians of Don Bosco's expertise in TVET, the institution was entrusted to their hands and since then, the Salesians of Don Bosco have been overseeing the institution's operations. Despite the decreasing support from the founders and the two connected NGOs, KIITEC has shown remarkable resilience, continuing to operate without their financial support since 2023.

Don Bosco KIITEC is certified to offer a diverse spectrum of programs, encompassing diploma programs, VOTECT[2], and PROTECT[3]The diploma programs (NTA 4-6) focus on four primary programs: Industrial Automation, Computer Engineering, Electronics and Telecom, and Electrical and Renewable Energy Engineering (Solar). These core programs were developed in response to a thorough situational analysis, which underscored the substantial shortage of skilled professionals in these sectors. By offering these programs, we are playing a crucial role in addressing this shortage and contributing to the development of Tanzania's workforce.

While each of the three diploma program years represents an exit level according to the TVET model in Tanzania, approximately 99 % of DB KIITEC students opt to progress to the final level, recognizing the significant advantages it offers regarding employability and market relevance. The institution's total student enrollment capacity is 320, and current student enrollment ranges to 209.

---

1 https://kiitec.ac.tz/

2 VOTEC are the short vocational training programs that KIITEC offers in IT, Basic Computer, Electrical wiring, and Solar installation.

3PROTECT are professional courses KIITEC offers to employees according to demand from various companies in IT, Basic Computer, Electrical wiring, and Solar installation.

LONG COURSE ENROLLMENT: 2024												
Level	Electrical & Computer Engeneering			Electrical and Industrial Automation Engeneering			Electrical and Telecommunication			TOTAL		
	F	M	T	F	M	T	F	M	T	F	M	T
NTA 6	4	5	9	3	11	14	1	2	3	8	18	26
Sub Total NTA 6	**4**	**5**	**9**	**3**	**11**	**14**	**1**	**2**	**3**	**8**	**18**	**26**
NTA 5 (Oct intake)	2	5	7	1	12	13	1	5	6	4	22	26
Sub Total NTA 5	**2**	**5**	**7**	**1**	**12**	**13**	**1**	**5**	**6**	**4**	**22**	**26**
NTA 4 (OCT intake 2023/2024)	1	4	5	0	14	14	1	2	3	2	20	22
NTA 4 (March intake 2023/2024)	7	0	7	3	5	8	2	1	3	12	6	18
Sub Total NTA 4	**8**	**4**	**12**	**3**	**19**	**22**	**3**	**3**	**6**	**14**	**26**	**40**
Grand Total	**14**	**14**	**28**	**7**	**42**	**49**	**5**	**10**	**15**	**26**	**66**	**92**

SHORT COURSE ENROLLMENT												
Course	Computer Application and Maintanance			IT & Security			Domestic Electrical and Solar Installation			TOTAL		
	F	M	T	F	M	T	F	M	T	F	M	T
VOTEC	8	5	13	3	5	8	16	80	96	27	90	117
Sub-Total	8	5	13	3	5	8	16	80	96	27	90	117

1.2. THE PROJECT BACKGROUND:

The project inception for Don Bosco KIITEC emerged from a comprehensive situational analysis, which highlighted significant financial constraints impacting the institution's operations. The analysis revealed a heavy reliance on three primary funding sources: school fees, income-generating activities, and occasional support from development partners, all of which were insufficient and unpredictable. These financial challenges led to issues such as deferred maintenance, inadequate facilities, staffing difficulties, and a lack of modern educational resources. In response, the project was designed to enhance financial management, diversify the institutions' revenue streams, strengthen development partnerships, invest in infrastructure, and upgrade educational resources to contribute to the institutions' vision of becoming a leading provider of quality technical education and training to empower the youth of Tanzania and Eastern Africa region. The designed project was developed to strategically contribute to the transformation of Don Bosco KIITEC into a financially resilient and educationally robust institution, capable of sustainably delivering high-quality technical and vocational training and contributing to the region's socio-economic development.

The developed project design, which closely aligns with the institutional strategic plan, represents the first phase in a strategic response to address the pressing issues facing both Don Bosco KIITEC and Technical and Vocational Education and Training (TVET) in Tanzania. This design primarily aims to contribute to the development of the envisioned institutional infrastructure, enhance course offerings, diversify income streams, and strengthen partnerships and collaborations.

SECTION TWO: PROJECT IMPLEMENTATION

The implementation of the project was fundamentally guided by the comprehensive project design, ensuring a structured and strategic approach to addressing the identified challenges as indicated in the project proposal.

2.1. GENERAL ACTIVITIES.

2.1.1. PROJECT ORIENTATION AND INDUCTION.

After the completion of the signing of the project contract and before the disbursement of the first installment of funding, the PDO team conducted a comprehensive project orientation and induction session for the "Empowering Tanzanian Youth through Enhanced Technical Training" initiative at Don Bosco KIITEC in Arusha, Tanzania. The PDO team (comprising the PDO Director, Program Manager, Accountant, and Program Officer) visited and met with the KIITEC project implementation team, (including the principal, administrator, accountant, and project-involved staff). The session covered the project's objectives, activities, expected results, timeline, reporting and M&E plans, budget, financial procedures, policies, and team organization and arrangement. This foundational meeting aimed to foster high team collaboration and ensure everyone involved was thoroughly informed of the project's critical details to guarantee smooth implementation.

This proactive approach by the PDO team was essential to ensure the project's success from the outset. The discussions and alignment of all aspects of the project laid a solid groundwork for effective project execution. The orientation ensured that all team members were well-prepared and clearly understood their roles and responsibilities, promoting seamless coordination and collaboration.

2.2. SO-O1: TO ELEVATE THE QUALITY AND RELEVANCE OF TVET EDUCATION AT DON BOSCO KIITEC TO MEET THE SPECIFIED STANDARDS AND INDUSTRY REQUIREMENTS.

A.1.1. UPDATING AND UPGRADING EQUIPMENT, TEACHING MATERIALS AND RESOURCES.

a) The First phase of the project execution Don Bosco KIITEC focused on improving the computer lab among other departments. The latter was due to the obsolete nature of the department which largely limited the education provision. Recognizing the need to replace outdated equipment, the institution invested in new computer items, including purchasing 8 CISCO switch catalyst 2960 POE. These items have been installed and are now operational, significantly enhancing the quality of hands-on training provided to students enrolled in the Electrical and Computer Engineering department. This initial investment marks a critical step towards modernizing our computer lab, aligning it with industry expectations and technological advancements. With the procured items students in the Electrical and Computer Engineering department can gain a comprehensive understanding of modern networking technologies, preparing them for careers in network engineering, systems administration, and IT management. With the newly procured equipment practical orientations in Network Configuration, PoE Technology, PoE Configuration, Network Design

and Implementation, and Security Features such as Access Control and Network Segmentation can be effectively trained to students enrolled in the department.

Picture 1 Showing the CISCO switch catalyst 2960 POE purchased items before installation.

b) The First phase of the project execution also entailed the general maintenance & repair and replacement of Solar batteries at the existing installed 32 KW campus mini-grid to ensure reliable electricity for the DB KIITEC school section power provision. The institution engaged Photons Energy to assess the existing solar energy system in collaboration with the institution's solar energy training unit. The assessment results identified a need to replace the old and worn-out system batteries, 24 pieces of 110Ah 2V*24pcs lead-acid batteries with ten units of 5.3kWh lithium-ion batteries, resulting in a total capacity of 53kWh battery bank.

The institution's decision to switch from lead-acid batteries to lithium-ion batteries was based on the fact that lithium batteries offer more advantages, including an extended lifespan of 7 to 15 years, higher energy density, reduced weight, and faster charging capabilities. The decision to purchase ten lithium-ion batteries was guided by the technical calculation aligned with the grid tie ratio and the limitation imposed by the open-loop formula, which dictates a ratio of 21kWt *3.2 divided by the 5.3kWt battery size, resulting in approximately 13 batteries. However, due to the open-loop limitations system, the institution opted to install ten batteries equivalent to 53kWt to ensure optimal performance, factoring in the potential losses within the system.

These batteries have been successfully installed and are now fully operational, significantly enhancing the efficiency and reliability of the existing campus mini-grid. This upgrade ensures uninterrupted power supply to the administration buildings, classrooms, and workshops, facilitating

smoother operations and creating a better learning environment for our students. The institution plans to repurpose the 24 old batteries for training purposes in the envisioned innovation hub, which will in turn provide valuable hands-on learning opportunities for the enrolled students.

Photo 2; Showing the old lead-acid batteries, which have been replaced.

Picture 3 & 4; Showing the new lithium-ion batteries installed at KIITEC solar energy system.

A.1.2. CONDUCTING PROFESSIONAL DEVELOPMENT TRAINING FOR TRAINERS TO ENHANCE THEIR TEACHING METHODS AND TECHNICAL SKILLS.

Investments in continuous professional development and training programs for trainers to enhance their skills and ensure they stay current in their fields, as well as in pedagogical methods, were key focuses identified in the project design. In the initial phase of project execution, Don Bosco KIITEC undertook two major activities to promote the continuous development of institutional staff: i) technical training on high-performance computers at the Nelson Mandela African Institution of Science and Technology (NM-AIST) and ii) a refresher training on NACTVET institutional operational procedures, covering orientation, induction, student application processes, exam setting, standardizations, and the annual school calendar, etc.

i) Recognizing the importance of continuous professional development, Don Bosco KIITEC sent a tutor to a 4-day workshop on high-performance computing (HPC) at the Nelson Mandela African Institution of Science and Technology (NM-AIST). This comprehensive training provided an introduction to the fundamentals of HPC and its applications, covering HPC architectures such as processors, memory hierarchy, and storage systems, along with key performance indicators. It also included the installation and configuration of HPC hardware and software, cluster management techniques, and the use of monitoring tools for system performance and resource utilization. The curriculum featured programming languages commonly used in HPC, such as C, C++, and Fortran, parallel computing paradigms like MPI and OpenMP, and optimization techniques for efficient code execution. Additionally, the training explored the application of HPC in various fields, highlighting its use in scientific research for simulations, data analysis, and computational studies, as well as real-world industry applications in engineering, finance, and biotechnology. The role of HPC in emerging technologies such as artificial intelligence, machine learning, and big data analytics was also examined. This intensive training equipped the tutor with cutting-edge knowledge and enhanced their ability to deliver more engaging and effective lessons, ultimately benefiting the students through improved instructional quality.

ii) Don Bosco KIITEC also prioritized the professional development of its administrative staff by sending the school dean and the admission officer to a NACTVET refresher workshop. This workshop covered key areas of institutional operations, including orientation and induction processes for new students and staff, efficient management of student application processes, best practices in exam setting and standardization to ensure fairness and consistency, and effective planning and coordination of the annual school calendar. The training aimed to enhance operational efficiency, improve the student experience, ensure consistent and fair assessments, and support strategic planning, ultimately contributing to the professional growth of the staff and the overall improvement of institutional operations at Don Bosco KIITEC.

A.1.3. CONDUCTING INTERACTIVE AND EXPERIENTIAL LEARNING METHODS, SUCH AS PROJECT-BASED LEARNING AND HANDS-ON ACTIVITIES.

Throughout the project execution, Don Bosco KIITEC has facilitated experiential learning, enabling students to apply classroom knowledge to real-world scenarios. This approach has empowered

students to design and implement various projects, translating theoretical concepts into practical applications. Notably, electrical, industrial, and automotive students collaboratively designed an automotive mini-plant for producing and packaging beverages, showcasing their ability to integrate learning with innovative, real-world solutions.

The automotive mini-plant project undertaken by students at Don Bosco KIITEC exemplifies a comprehensive endeavor that merges engineering expertise with practical application skills. Through collaborative efforts, students from various disciplines, including electrical, industrial, and automotive engineering, conceptualized and executed a multidimensional production facility for manufacturing and packaging beverages. This project although still in progress with an anticipation to be completed by July 2024 involved thorough planning and design considerations, encompassing facility layout, equipment selection, beverage processing, packaging, labeling, automation systems, as well as energy management. By engaging in hands-on activities throughout the project, students gained invaluable experience in project management, interdisciplinary collaboration, and problem-solving, bridging the gap between academic learning and real-world industry practices. Furthermore, the automotive mini-plant serves as a dynamic learning environment that fosters innovation, creativity, and practical skills development, preparing students for successful careers in the automotive and manufacturing sectors.

The impact of interactive experiential learning activities extends beyond the completion of a project. Through these practical projects, students acquire technical skills and develop essential soft skills such as problem-solving, teamwork, and innovation which are crucial in the world of work. Moreover, this project is a valuable learning resource for future students, nurturing a culture of knowledge-sharing and collaboration within the campus.

Picture 5; Showing the new student projects, with the two electrical students explaining the project details to the PDO visitors' team members.

A.1.4. INVESTING IN INFRASTRUCTURE IMPROVEMENTS.

The first phase of the project execution involved initiatives to develop architectural drawings to expand the DB KIITEC campus infrastructure. Recognizing the importance of this task, the institution sought to engage a competent architectural and engineering company. To ensure a competitive selection process, DB KIITEC advertised the terms of reference through various channels, including social media, noticeboards, emails, and direct contacts with known architectural and engineering firms in Arusha. This outreach attracted four expressions of interest, which were narrowed down to two finalists: Tujenge Architects and Kapwani Architects Ltd. The finalists were asked to submit an extended concept note based on the institutional specifications. After thoroughly reviewing their concept notes and budget proposals, Triple-A Architects was awarded the tender due to their extensive experience, the quality of their design, flexibility in payment arrangements, and previous successful collaboration with KIITEC. The architectural study and design began in mid-March, and DB KIITEC has received the first draft, currently under review. The final designs, drawings, and bills of quantities are expected by the end of June 2024.

This architectural and structural planning phase is crucial for realizing the institution's master plan, aiming to accommodate up to 1,500 learners per year and significantly enhance financial sustainability. Completing these plans will provide the foundation for further infrastructure development, enabling DB KIITEC to offer additional classrooms, workshops, hostel facilities, a volunteer house, and a multipurpose hall. These improvements will allow the introduction of new courses, both science and non-science-based, broadening the institution's enrollment capacity and better serving the community's educational needs.

Picture 6; Showing one of the views of the developed architectural designs for the envisioned structure to be developed at DB KIITEC.

2.3. SO-O2: TO ENHANCE ACCESS AND EQUITY IN STEM-FOCUSED TVET PROVISION FOR MARGINALIZED AND UNDERPRIVILEGED YOUTH AND ADMISSION NUMBERS AT DB KIITEC.

A.2.1. DEVELOPING MARKETING AND PROMOTIONAL MATERIALS TO REACH OUT TO THE TARGET AUDIENCE.

Throughout the project execution, DB KIITEC developed a comprehensive range of print promotional materials, including brochures, flyers, posters, and banners to raise awareness and promote the institution to the general public. These materials, featuring detailed information about programs, faculty, facilities, and admission procedures, were strategically distributed at community events, educational fairs, and in high-traffic areas to engage with prospective students and their families. The promotional campaign significantly enhanced the institution's visibility and reputation, leading to increased inquiries and applications (particularly for NTA 4 enrollments), while also targeting potential donors and partners to garner additional support. Complemented by digital campaigns, the integrated approach ensured a cohesive and far-reaching promotional effort. DB KIITEC plans to continue updating and developing new materials to reflect its evolving programs and achievements, aiming to expand its reach to attract a diverse student body.

A.2.2. ORGANIZING EVENTS AND WORKSHOPS IN UNDERSERVED COMMUNITIES TO RAISE AWARENESS OF STEM-FOCUSED TVET PROGRAMS.

In raising awareness of STEM in underserved communities, DB KIITEC has made significant efforts to promote TVET programs and to increase enrolment at DB KIITEC's potential in the future. The institution employed a Marketing/Job Placement Officer to spearhead these efforts, who commenced work in January 2024 with a one-year contract. His strategic outreach initiatives have included physical visits to schools and companies across four regions—Tabora, Dodoma, Iringa, and Manyara—and within the Arusha region. These visits have effectively disseminated information about the institution and course offerings and offered career guidance to students, enhancing awareness and interest in TVET education among students and communities.

Furthermore, KIITEC's participation in the NACTVET TVET exhibition held in Tanga from May 23rd to 31st, 2024, showcased the institution’s programs to a broader audience, fostering connections with potential students and industry partners. These efforts are increasing awareness and potential enrolment in the future and setting the stage for a sustainable pipeline of skilled graduates ready to transition smoothly into the job market.

A.2.3. ESTABLISHING A SCHOLARSHIP FUND TO SUPPORT UNDERPRIVILEGED STUDENTS AND WOMEN.

During the course of the project execution, DB KIITEC conducted a thorough assessment to identify students in need, utilizing criteria such as family background, orphan status, physical challenges, marital status, and recommendations from local government and church leaders. From this process, four NTA Level 4 students were selected for scholarship support. Three students (1 male & 2 Females) will receive full sponsorship, covering 100% of their school fees (1,285,000 TZS each per year for three years), while one student (female) will receive annual support of 478,334 TZS for three years. These support levels were determined based on individual assessments following the established criteria.

Initially, the institution planned to sponsor ten students for one year. However, recognizing that this approach could lead to financial struggles and potential dropouts in subsequent years, the institution opted to utilize the scholarship fund to provide continuous support for the selected candidates throughout their entire educational journey from Level 4 to Level 6. This strategic adjustment ensures that the selected students can complete their education without interruption, thereby maximizing the impact of the scholarship program and ensuring value for money.

A.2.4. ESTABLISHMENT OF A JOB SERVICES OFFICE.

Through the course of the project execution, the institution strategically employed a Job Services Coordinator who also plays a crucial marketing role, enhancing both graduate employability and institutional visibility. This dual role encompasses personalized career counseling, resume-building workshops, and internship placements, while also establishing relationships with businesses and maintaining an alumni network. On the marketing front, the coordinator has the responsibility to organize promotional events, develop marketing materials, and conduct community outreach to attract prospective students. These efforts through the JSO department are aimed at increasing graduate employability, higher enrollment numbers, stronger industry connections, and sustainable institutional growth, ensuring DB KIITEC's programs remain relevant and attractive.

2.4. SO-O3: TO NURTURE ENTREPRENEURSHIP AND INNOVATION SKILLS IN TRAINEES AT DB KIITEC.

A. 3.4. DEVELOPING PARTNERSHIPS WITH OTHER PARTNERS AND ORGANIZATIONS.

Throughout the project implementation, DB KIITEC prioritized developing strategic partnerships with organizations and stakeholders to support the institution in achieving its strategic objectives. This involved thorough research to identify potential partners, including NGOs, government agencies, private sector companies, and educational institutions, focusing on those with aligned missions and values. Key potential partnerships acquired included initial collaborations with PAVVET[4]. PAVVET is a non-profit association based in Finland, which aims to capitalize on the excellence of the Finnish education model and contextualize it to serve local African needs. It focuses on developing the vocational skills of African youth directly through a virtual training platform and blended learning modes, as well as through capacity-building programs for African technical and vocational education and training institutions (TVET). Further, the DB KIITEC administration has also initiated exchanges with Don Bosco Salesian Missions New York on the potential possibilities to seek funding from the US government through the ASHA grants[5].

2.5. SO-O4: TO ENHANCE AND FORTIFY THE FINANCIAL SUSTAINABILITY OF DON BOSCO KIITEC.

A 4.2 DEVELOPING AN INCOME GENERATION STRATEGY AND CONCRETE ACTIVITIES.

In the first phase of the project execution, which focused on developing an income generation strategy, the institution made substantial progress toward financial sustainability, The institution recognized the need to diversify its revenue streams and established a carpentry and joinery

[4] https://pavvet.africa/about.html

[5] https://www.usaid.gov/document/how-apply-asha-grant

production unit. Initially intended to produce fixtures and furniture for the newly constructed hostel and the school, this unit quickly attracted significant external demand. Consequently, it has evolved into a revenue-generating enterprise serving institutional needs and external customers. Building on this success and the acquired funding support, DB KIITEC has allocated part of the Income Generation Activity (IGA) budget to establish a welding production unit, which complements the carpentry and joinery unit. The institution has purchased and installed new welding machines, enhancing DB KIITEC's capacity to meet market demands.

These initiatives are anticipated to have a tangible impact on the financial health of the institution in the mid and long-term future as the units (carpentry and welding units) meet the institutional internal needs and generate additional income, enabling DB KIITEC to cover approximately 15% of staff salaries from the revenue acquired from the production units. The remaining portion of the IGA budget is anticipated to be used to procure more wood, boosting the carpentry and joinery unit's capacity to serve a broader customer base and generate income.

2.6. PLANNED ACTIVITIES FOR THE NEXT QUARTER OF THE PROJECT EXECUTION.

2.6.1. Mini-Grid Expansion: The next phase of the project execution will entail upgrading and expanding the institution's solar system by an additional 20.25 kWt, ensuring that solar electricity reaches all buildings on campus. This expansion is crucial for enhancing energy efficiency and sustainability, significantly reducing operational costs, and promoting a greener learning environment.

2.6.2. Establishment of Income Generation Activities (IGA): The remaining balance of the IGA budget will be invested in boosting the production unit, specifically the welding and carpentry units. This investment will enhance the institution's capacity to produce high-quality goods for both internal use and external sales, thereby generating additional income to support school operations and improve financial sustainability.

2.6.3. Peer-to-Peer Exchange with Don Bosco Solar Ghana: Scheduled for July 2024, this exchange program will facilitate the sharing of knowledge and best practices between DB KIITEC and Don Bosco Ghana. The collaboration aims to foster closer cooperation, leveraging each other's strengths to improve the solar training programs and operational efficiency.

2.6.4. Support for Student Practical Projects: The institution will continue to provide robust support for students to carry out their practical, project-based learning activities.

2.6.5. Teacher Training in Technical and Pedagogical Skills: In July 2024, the institution aims to conduct a comprehensive training program for its teachers, delivered by NACTEVET and focusing on the Competence-Based Education and Training (CBET) curriculum. This training is designed to enhance the teachers' skills and competencies.

2.6.6. Establishment of an Innovation Hub: The institution aims to set up an innovation hub, including the procurement of necessary furniture, equipment, and fixings.

2.7. CHALLENGES.

2.7.1. Supply of Wood Materials: Procuring wood for the carpentry and joinery production unit has been challenging due to legal requirements mandating purchases from registered suppliers, who are few in Arusha and often overwhelmed with orders. This caused some delays in receiving essential wood supplies, impacting the production schedule.

2.7.2. Mini-Grid Expansion Budget Shortfall: The institution faced a budget shortfall of approximately 5 million TZS for the mini-grid expansion. This was due to rising prices caused by inflation and fluctuations in the dollar exchange rate.

SECTION THREE: CONCLUSION.

The strategic initiatives undertaken by DB KIITEC throughout the project implementation have yielded significant advancements in achieving the institution's strategic objectives. By developing and leveraging strategic partnerships with a diverse range of stakeholders, DB KIITEC has enhanced the quality of its educational offerings, improved student enrollment, and broadened its institutional reach within the community and beyond. These efforts have ensured a robust and sustainable growth trajectory, creating a pathway to position DB KIITEC as a leading technical and vocational education provider in Tanzania. As the institution continues to expand and innovate, the groundwork laid during this phase of the project will serve as a solid foundation for future success, driving continuous improvement and fostering long-term institutional sustainability.