



INDUSTRIAL AND MANUFACTURING DEVELOPMENT IN TANZANIA: THE ROLE OF NACTVET



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INTRODUCTION

The role of inclusive and sustainable industrial economic development and in general human development is increasingly recognized at continental level in Africa and at international level with dedicated inclusion of a dedicated Sustainable Goal (n.9). Anticipated benefits such as fostering economic growth, reduction in economic vulnerability, large forward and backward linkages to other sectors, positive spill-over effects of skills development and technological innovation across economy and direct and indirect job creation are some of the reasons why industrialization was brought to the forefront of national development plans of the Country (MIT, 2015).

The Government of Tanzania is focusing on industrialization of as targeted in "Vision 2025" and making efforts of improving its business environment through enhancement of their productivity, management capacity and international competitiveness. However, to realize the dynamic private sector development, so many challenges are still remaining. Some Tanzanian large enterprises are growing steadily, but a large majority of MSMEs remain stagnant while agglomeration of the relevant industries is emerging in some areas. One of such challenges include skills development and its effects in fostering industrial economy.

As labor market becomes more dynamic and complex, skills needed are constantly evolving. These changes are influenced by global divers of changes such as technological advancement, digitalization, globalization, climatic changes, demographic and trade. While these drivers of change present opportunities to accelerate economic development and valued employment, they have huge implications for skills development. Because of these, usually questions arise: What kind of strategies should be there to support labor market entrants, workers and enterprises while adjusting to new reality. This is because the global drivers are redefining the requirements for skills for new and existing occupations and giving rise to new skills and competence. This new reality is also true to Tanzania where economic growth has not translated into significant employment.

Against this backdrop, the demographic structure with significant number of young people around 800,000 to 1,000,000 (15-24 years) enters the labor market every year, but this does not service the needs of labor market as majority of these youths do not have necessary skills to find a good job. Addressing Tanzanian unemployment challenges through industrialization requires consented efforts of all stakeholders articulated in clear vision of skilling up the young population entering into the labor market.

NACTVET AND SKILLS FOR INDUSTRIAL DEVELOPMENT IN TANZANIA

Under the Act, Cap. 129 as amended in 2021, NACTVET is mandated to, among other functions, regulate and coordinate training leading to skills development to technical and vocational training institutions and centers. Specifically, these functions include registration and accreditation of TVET institutions, approving curricula/programmes, maintenance of quality standards and skills validation through various means including recognition of prior learning (RPL)

Accordingly, the Council is charged with responsibility to help TVET institutions and centers develop systems for responsive skills development and address imbalances in the supply and demand for critical skills. These roles aim at leveraging opportunities to performance of labor and market through responsive skills development.

In order to fulfill these roles, the Council implements various activities as they are embodied in Vision 2025, National Five-Year Development Plan 2021/22-2025/26, the Education and Training Policy, 2014 and other related policies that focus on equitable access to quality technical and vocational education and training (TVET) is provided to all youths and adults across sub-sectors. Basically, TVET, its main emphasis is on equal opportunity to learn, develop and enhance knowledge, skills and competences regardless of gender, disability, disadvantaged and vulnerability or any kind of obstacle, by all to equally participate and contribute in creating trans-formative changes and development in the national economy.

In the subsequent sections, we review some of the contributions of NACTVET in industrial development, gravitating only on key aspects such as increasing access to TVET education, programmes that respond to needs of labor market and quality of educational programmes.

REGISTRATION OF TECHNICAL INSTITUTIONS

In order to increase equitable access to technical education, the Council registers and accredits institutions and programmes offered. Currently, a total 463 institutions distributed across the three Subjects Boards; Business, Tourism and Planning (BTP), Health and Allied Sciences (HAS) and Science Allied and Technology (SAT) (155 for BTP, 210 and HAS and 98 for SAT) have been registered.

Number of technical institutions registered increased from 334 in 2017/2018 to 463 in 2022, representing an expansion of 39%. During this period, there was a general expansion of provision of technical education across all subject boards. However, pronounced expansion was observed in Health and Allied Sciences (Figure 1).



Figure 1: Trend of Cumulative Registration of TIs

The expansion in registration of Health and Allied Sciences colleges was in a response to initiatives of the Government in improving health-care sector in Tanzania. However, expansion of technical institutions in Science, Technology, Engineering and Mathematics (STEM) remained low compared to other occupations but steadily increasing (Table 1).

Table 1. Cumulative Registration of Technical Institutions - 2022

Subject Board	Registered Technical Institutions	Ownership		Registration Stages	
		Public	Private	Full	Provisional
BTP	155	75	80	131	24
HAS	210	47	163	185	25
SAT	98	58	40	91	7
TOTAL	463	180	283	407	56

ACCREDITATION OF TECHNICAL INSTITUTIONS

Accreditation is the highest level of quality standard in any training institutions. It entails recognizing institutions and programmes that have demonstrated appropriateness of the institutional mission and objectives; effectiveness in meeting its mission and objectives. During the period of 2017/2018 to 2022/2023, the Council has guided and accredited a total of 249 institutions. In 2018/2019, the Council recorded highest number institutions accredited (Figure 2). However, number of institutions accredited dropped for all categories (provisional, candidacy and full) before increasing in 2022/2023. This makes total accredited institutions to be 249 out of 463 institutions registered by the Council.

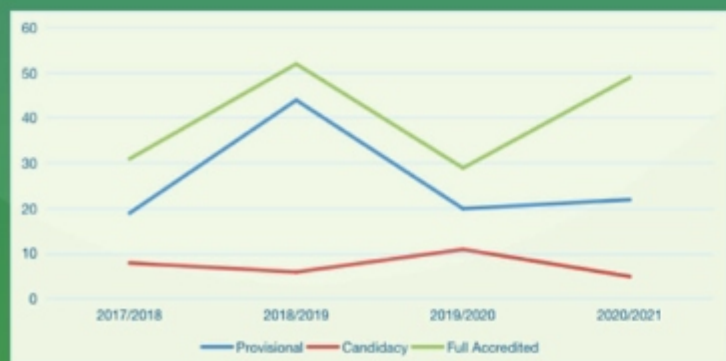


Figure 2: Trends in accreditation of TIs

STUDENTS ENROLLMENTS IN TECHNICAL INSTITUTIONS

Among the functions of the Council includes coordination of student's admissions into various technical institutions. Empowered through the Act, NACTVET ensures that only qualified applicants join various programmes offered by technical institutions. As pointed out earlier, during the period of the last three years, there was a growing number of technical institutions and the corresponding student's enrollment. Albeit, there was slight decrease in number of students enrolled for technician programmes from 150,769 from 2017/2018 to 146,691 in 2018/2019, student's enrollment recording the highest number in 2021/2022 academic year - reaching 179,518 (Table 2). Increase in student's enrollment in technical education and training has provided equal opportunity to learn, develop and enhance knowledge, skills and competences and contributed in creating transformative changes and development in the national economy.

Academic Year	BTP		HAS		SAT		Total
	Male	Female	Male	Female	Male	Female	
2016/17	27,894	35,967	24,456	29,789	14,346	19,566	152,018
2017/18	28,767	39,879	26,223	20,543	23,678	11,679	150,769
2018/19	33,827	43,879	22,033	19,073	19,334	8,545	146,691
2019/20	39,998	51,460	26993	23671	20504	9839	172,465
2020/21	62,214	65,214	26,288	25,695	22,742	8,622	210,775
2021/22	55,210	53,215	22,270	21,659	20,654	6,510	179,518

Table 2. Enrolment Trend in Technical Institutions 2016/17 - 2020/21

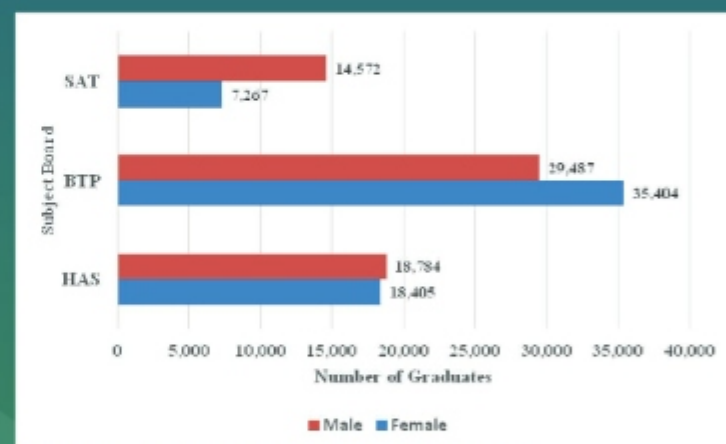


Figure 3. Graduates by Subject Board, 2021/2022

NUMBER OF NEW PROGRAMS

The Tanzania Government is currently focusing on the development of industrial economy which requires skilled graduates across the industrial production chain. This requires training institutions to focus and prioritize the required industrial skills. In the period of 2017/2018 to 2020/2021, the Council has accredited new 17 programmes offering skills addressing industrial requirements. Some of these programmes address the skills need for the currently prioritized sectors of economy. These include agribusiness, ICT, energy, transport and logistics, tourism and hospitality and construction (Figure 4).



Figure 4. Trend of New program/recognized program/accredited

NEW ROLES IN VOCATIONAL TRAINING

The new roles have extended NACTVET functions from technical education and training to vocational education and training. Thus, NACTVET is now responsible for coordinating and overseeing the entire technical and vocational education and training (TVET) system in Tanzania. Therefore, the new roles of NACTVET relating to regulation of vocational education and training among others include registration of vocational training centers, accreditation of vocational education programmes and short courses, validation of curriculum, quality assurance role and other regulatory functions. These new roles are meant to increase accountability in skills development through in vocational by providing regulatory roles and quality assurance.

SKILLS VALIDATION – MOVING FROM LEARNING TO PERFORMANCE – FUTURE OUTLOOK

For majority of Tanzanian, skills acquisition takes place while working in the informal sector. Unfortunately, informal apprentices are not recognized leaving majority of the skilled youth at the disadvantaged space. Despite majority of youth having the right skills to be employed in the formal sector, the contributions of these skills in projects and investments are limited. They lack certification and recognition resulting from validation of their skills. In the absence of recognized qualifications, a large proportion of people face severe disadvantages in getting decent jobs, migrating to other regions and accessing further education, even though they might have the necessary knowledge and skills. The skills validation through RPL process can help these individuals acquire a formal qualification that matches their knowledge and skills, and thereby contribute to improving their employability, mobility, lifelong learning, social inclusion and self-esteem.

Recognizing the importance that a person who has learned outside of formal education is a critical issue in workforce development discourses, NACTVET in collaboration with stakeholders has set a framework for skills validation which start working in few months to come. Skills validation will benefit people in transitory, low paid

or socially low status employment having their knowledge, skills, and competences being fully recognized by educational institutions or employers. At the same time, receiving credentials or qualifications upon an assessment of learning at work is expected to compensate for impoverished, inaccessible, or non-existing educational provision.

In order to achieve this the Council has initiated cooperation Engineering Construction Industry Training Board (ECITB) and International Apprenticeship and Competency Academy (IACA) in establishing the competency requirements within Tanzania, to be applied to any registered vocational training providers and apprenticeship training in engineering and construction industry.

TOWARDS DEVELOPMENT OF NATIONAL OCCUPATIONAL STANDARDS (NOS)

In order to address skills challenges associated with irrelevant curricula that do not meet the needs of labor market, the NACTVET currently develops the National Occupational Standards (NOS) to provide a general standard for various occupations in sectors of economy. Upon completion, NOS will help in identification of the skills and knowledge needed for workers to perform co competently in the workplace.

By applying a standard in any vocational trade skills (National Occupational Standards-NOS)), then validating the skills attained by a person against a standard, by a demonstration of competency through both theory and practical tests, will enable training providers to qualify the persons with prior learning and issue a certificate of competency in that particular trade skills. Apprenticeship programs will be developed against the same NOS, in collaboration with Industry (Employers) and ensure the curricula and modules are appropriate to the trades and skills required by industry as well as addressing two key elements that are missing in existing curricula including HEALTH and SAFETY MODULE and BEHAVIOR MODULE (Attitude towards employment as a qualified tradesman/women).

CONCLUSIONS AND RECOMMENDATIONS

Despite this impressive trend, Tanzania TVET system is facing several challenges both at systemic and implementation/provider level. Some of these challenges include inadequate teaching and learning resources while teaching curricula that are not adaptable to the demands of labor market. Generally, the in the current implementation of education system including TVET, too much has been given to examinations and certifications than skills acquisitions. Quality of teachers and requisite industrial experience are some of the major hinderances to quality of education in the Country.

Greater partnership with Industry and Employers across all sectors of society, with specific emphasis in the key sectors of growth, namely, Mining, Oil and Gas, Agriculture, Telecom, Infrastructure and Energy, to ensure industries role is key in training for employment, competencies are recognized by employers both nationally and internationally.

While Schools and Colleges are stuck in past innovation that were successful in the past 20 years, curriculum delivery in schools and colleges needs to focus on the what skills will be needed in future for industrial economy. This will help develop national development plans that recognize the importance of skills in fostering economic growth. Furthermore, removing stigma to non-academic pathways will help address some of the skills shortage for economic development.

REFERENCE

Ministry of Investment and Trade (2015). Tanzania Industrial Competitiveness Report. Ministry of Industry, Trade and Investment of the United Republic of Tanzania (MITI).