Williams College – Center for Development Economics

Policy Brief

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Beyond Basic Education: The case for investing in Technical Vocational Education and Training (TVET)

Why it is essential and a soft approach to better execution

Summary

Uganda's industrial aspirations are boldly stated in the medium and long-term strategy documents. The objective of transitioning from an agrarian economy to manufacturing is soundly based on the large agricultural production base available in the vastly arable Uganda. But, the transition to industry has to be accompanied by relevant skills. With a burgeoning population, many of them young and recipients of universal primary Education, skills training is an essential channel to absorb the influx and redirect it to the rapidly expanding manufacturing sector, which now includes oil & gas. Skills development that co-opts private sector involvement, is demand-driven, context-specific, and adequately funded is a vital successor to basic Education and can solve niggling growth challenges, like unemployment and labor productivity, and ultimately lead to growth.

1. Introduction

i. Background

Most Governments have a social contract with the electorate that is based on the former delivering economic growth to be enjoyed the latter. The only cross-national differences we can observe relate to how the desired growth should be delivered. At early stages of growth and development, where many low-income countries such as Uganda belong, the strategies often advocate that this growth should be mediated through one form or another of industrial development. Indeed, in Uganda today, the third national development plan states that the growth objectives will be pursued under the theme of "Sustainable Industrialization for inclusive growth, employment, and sustainable wealth creation."[1] Resultantly, this mechanism will be facilitated, in no small part, by the availability of effective technical and vocational skills to service the needs of Industrial development, given that TVET is a " source of skills, knowledge, and technology needed to drive productivity in the new knowledge-based and transition societies.'[2]

[1] (NPA, 2021-2024)
[2] Okware, J. C., & Ngaka. (2017)

ii. Challenge

Despite the relative importance of TVET as a prerequisite for industry-led growth, there are constraints that limit the potential for its expansion and improvement. The key challenge facing TVET is one of the perceptions. Along varying prospects and economies, there is a well-documented preference for academic higher education versus TVET,[3] consistent in both urban and rural settings. For instance, a TVET college Principal indicated that in 2016, only 10% of students offered free government-aided education in TVET at his institution took up the offer.[4] The prevailing educational philosophy is that vocational training is the Education of last resort.[5]

Significantly, this misperception is premised on a narrow, antiquated, and flawed evaluation of the expected returns to vocational education extrapolated from some elements of human capital development theory, which mostly focuses on the raw calculus of monetary returns to investment in Education. This is despite the fact that many graduates from academic training still suffer significant levels of unemployment.

This defective view also afflicts the international funding agencies that influence the flow of investment into different parts of the education system. The net effect has been a systematic defunding of vocational education in favor of academic education both by governments and aid agencies.[6] The impact of this is that the private sector which has limited capacity and resources has been left to bear the burden of skills development in the economy.

Perceptions matter; because not only do they constrain demand, they curtail the optimal investment in the TVET subsector.

Given the above challenge and its cascading effect on the degree of Government prioritization on TVET, this brief will argue to situate TVET in the proper context for policy to be able to intervene. As such, the following section seeks to, first of all, cure the limited appreciation of the empirically determined importance of TVET by offering the rationale for it. The subsequent sections will articulate the unique opportunities that Uganda can exploit in the TVET subsector, followed by proposals to harness these opportunities. This will be followed by a section looking at the risks to the outlook, implementation challenges, and lastly a conclusion.

[3] Kim, J. (2021).
[4] Okumu, I. M., & Bbaale, E. (2018)
[5] Okware, J. C., & Ngaka, W. op.cit., p 35.
[6] Kim, J. op.cit., p 559.

2. Why TVET ?

"If you give a man a fish, you feed him for a day. If you teach a man to fish, you feed him for a lifetime." – Chinese Proverb.

i. Skilling for economic growth

The orthodoxy of basic Education as the only major human capital component needed for growth does not withstand scrutiny. A closer reading of the evidence emerging from the recent growth miracles like South Korea as well as analyses of historical growth paths of economic giants like Britain and Australia, point to a robust system of vocational Education that led to increases in both employment and national income.[7]

At a minimum, this shows that economic returns sufficient to catalyze transitional growth through manufacturing/industry, are attainable through vocational Education.

ii. Human Development

Abstracting away from the limiting quantitative growth contribution of TVET, a broader analysis indicates its positive impacts on human development. This form of training has the propensity to enhance human capabilities across a wider spectrum (e.g. psychological health, self-esteem), facilitating the individual's holistic development, as per Amartya Sen's classification of the same.[8] Indeed, this dimension of vocational Education is noteworthy, as human beings have complex and intangible aspirations and aren't synonymous with natural resources for whom the pure economic returns to investment are the only desirable results.[9]

iii. Labor market employability

An explicit goal of any form of Education is to increase one's chances of securing gainful employment. A number of studies have shown that the employability prospects for formal employment are significantly boosted by obtaining vocational training.[10]

iv. Addressing the skills gap

[7] Kim, J. op.cit., p. 559
[8] Kim, J. op.cit., p. 561
[9] Okumu, I. M., & Bbaale, E. (2018)
[10] Janice, J. H.-F. (2013)

A clear illustration of the extent of the skills gap in Uganda can be found in an enterprise survey conducted by the world bank, which showed that 14 per cent of firms reported the lack of adequate skills as a constraint on their performance.[11]

As the old adage goes, “Practice makes perfect”. Effective TVET binds teaching with work and goes beyond theoretical knowledge extending to the creation of practical capabilities[12]. There is vast evidence of the efficacy of 'learning by doing'. Trainees are, therefore, able to transition easily into the labor market, further reducing the necessity to invest in time-consuming and scarcely available opportunities for gaining work or apprenticeship experience.

Therefore, this model, which is mainly informed by requirements of labor demand, is vital for rolling back the skills mismatch that exists between employers and laborers in the marketplace.[13]

v. Youth unemployment

The heavy investment in basic education, despite unlocking myriad benefits, has not made a dent in the youth unemployment problem.[14] In fact, youth unemployment has even managed to stubbornly withstand economic growth, growing from 4.9% to 6.8% between 2010 to 2014, despite growth averaging 5.4% in that period.[15]

The answer then it seems, at least partially, lies in vocational education because it incorporates school leavers who may have dropped out at earlier stages of education. This renewal can stave off the total loss of employability that arises from a total lack of complete basic education if one eventually goes on to acquire the skills in TVET.

Additionally, because most people do not necessarily have a job in the traditional sense but instead perform a number of varied task-defined as a ‘portfolio of work’, to earn money, vocational training can boost their productivity in some of these tasks in ways that facilitate self-employment.[16]

3. Opportunities

[11] Okumu, I. M., & Bbaale, E. (2018)
[12] Okumu, I. M., & Bbaale, E. (2018)
[13] BTVET. (2012 p.15)
[14] Kim, J. op.cit., p.559
[15] Okumu, I. M., & Bbaale, E. (2018). & (World Bank, 2016)
[16] Blattman, C., & Ralston, L. (2015)

There are specific conditions in the Ugandan economy that make it eligible to benefit from prioritizing TVET. Some of the main ones are elaborated on below:

First, 70 % of Ugandans are involved in Agriculture, which is considered the backbone of the economy. This relative homogeneity of main economic activity is useful for targeting vocational training in so far as the types of industries in the economy will reflect the large-scale involvement in primary agricultural production.

Development focus has strongly pivoted away from decade-long public investment in infrastructure towards industrial development. As a result, vocational and Technical Education has a more substantial basis with anticipated increased demand from a growing manufacturing sector.

Uganda's largely Informal economy is characterized by several small and medium enterprises, which also happen to be the largest source of employment.[17] These enterprises are disproportionately involved in skill-based trades and can be targeted for skilling to enhance their productivity and earning potential.

The recent discovery of significant oil and gas reservices in the Albertine region is going to lead to exponential requirements for skilled workers in a wide array of areas from metal work, to catering, among others.

Following the reasonably effective deployment of Universal Primary Education focusing on basic education, there is an ample supply of learners produced under UPE that can be channeled through vocational training.

Research suggests vocational training suits low-income contexts.[18] Indeed, some of the more successful interventions with respect to vocational training geared toward improved labor outcomes were stronger in low-income countries.[19] This is likely because of the economic structure in these areas that is more in need of trade skills than higher-end sophisticated academic knowledge.

4. Proposals

In light of the challenges & opportunities highlighted above, the following proposals can extract the benefits of the opportunities, while simultaneously degrading the present difficulties in the TVET subsector:

[17] Okware, W. N. (2017)
[18] Kluve et.al (2018) & Kim op.cit., p 560
[19] Kluve et.al, op.cit.,p37

Vocational training should focus on leveraging the mass presence of Ugandans in primary agricultural production by conveying skills that are applicable not only for primary production but also across the agricultural value chain with a specific focus on vertically integrated agro-industry. Subsequently, competencies that are useful upstream, such as product marketing and enterprise development, can be introduced.

The current nationwide development of Industrial parks should include a deep focus on the provision of vocational training. This can be done by creating modest incentives for firms bidding to set up in the parks which also choose to undertake to support training through apprenticeship programs.

Relatedly, the firms that privately offer vocational training exclusively should be eligible for government financial support, but only if they can prove job placement.[20] This will strengthen the link between labor outcomes and training.

Additional Funding is an inevitable consequence of trying to restore vocational Education in Uganda.[21] The average cost for setting up a fully equipped vocational school is **USD 2 Million** (Education Sector Investment Plan), almost thrice the cost of setting up a secondary school. However, Public Private Partnerships with Industry groups can create mutually beneficial cost-sharing structures.[22] As a result, industries can have direct involvement in the training responsiveness and a guaranteed pipeline of skilled workers while the public objective of youth skilling and employment is met.

The low perceptions of vocational Education can be resolved by instituting a coherent and objective mechanism for certification and assessment to instill confidence among employers and attract individuals to participate in vocational training and supply the requisite vocational skills.[23]

The emphasis on providing skills that are well-matched with the needs of the labor market must be uncompromising. The conduct of regular labor force surveys[24] is an obvious way to ensure that up-to-date information in this regard is available to inform skills development curricula and training that are dynamic as technology and economies rapidly evolve.[25]

Vocational training can be further bolstered by coupling it with another proven and effective strategy of start-up capital conditional on certification. This strengthens the effect

[20] Ricou &and Moore. (2020)
[21]Okumu, I. M., & Bbaale, E. (2018)
[22] Okware, J. C., & Ngaka, W. op.cit., p 39
[23] Okumu, I. M., & Bbaale, E. (2018)
[24] Okumu, I. M., & Bbaale, E. (2018)
[25] (Ricou &and Moore, op.cit., p4

that skilling can have on poverty reduction because it removes capital constraints for skilled and productive individuals increasing probabilities for high marginal returns to capital.[26]

5. Risks

The immense and accessible opportunities, however, involve risks that can forestall attempts to exploit them fully. A few of these are listed below:

There is a general tendency for vocational training to reinforce gender biases around socially determined gender-specific work.[27] Equity must be embedded in skills development to avoid this pitfall. It should be done by explicitly codifying quotas to ensure equitable representation without being insensitive to specific constraints that may be causing gender biases in TVET.

Contexts sometimes vary; thus, programs and their results are not necessarily replicable across countries. Therefore, to minimize performance risk, piloting and experimenting with evidence-based curricula and skills development programs is crucial to guard against "white elephant" projects in the TVET sector that do not attract individuals nor impart the skills that are being demanded by the private sector.[28]

A TVET program is as good as the strength of its links to the private sector, industry, and other categories of labor demand. The inability to cultivate cooperation with the private sector in skills development can not deliver TVET education that improves labor market outcomes.

6. Conclusion

The promise of technical vocational training as a pillar of industry-led growth is a distinct possibility. However, the only plausible configuration that makes the promise reachable is one that is built on strong public-private partnerships engaged in a mutually beneficial collaboration that strengthens links between training for competencies and subsequent productivity in the workplace.

Crucially, the design of specific TVET curricula and programs should be based on evidence and experimentation to reduce the risk of failure. Where possible, TVET programs can be coupled with complementary strategies like start-up capital for graduates, as a means to elicit even more dramatic gains.

Overall, Government, in partnership with the private sector, should redirect funding to support the establishment of TVET institutions that are offering training on in-demand skills and provide a clear path to the world of work.

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[26] Blattman, C., & Ralston, L. (2015)
[27] Okumu, I. M., & Bbaale, E. (2018)
[28] Blattman, C., & Ralston, L. (2015)

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