Introduction

Education is intended to build competent persons, capable of supplying global economies with the expertise needed to compete effectively in modern times. Throughout the world, investing in education is regarded as one of the foremost duties of government, regardless of the prevailing system, whether centralized or devolved government. Where institutions of learning can partner with other institutions within the realm of learning and beyond, for the greater benefit of humanity and the expansion of knowledge, it is considered a major accomplishment. Although primary and high school levels build the initial capacity to think and reason in a logical manner, tertiary institutions have contributed the most to the expansion of knowledge and the breeding on innovative cultures. This report will analyze institutions of higher learning and their contribution to society, as well as associated costs of operation and risks of such operation. The main focus of the report will be Jomo Kenyatta University of Agriculture and Technology.

General Overview

In Kenya, tertiary education sums up university and college education, the latter of which includes professional courses and polytechnic training. This report will deal specifically with university education since this is where the institution of focus lies. Under the current 8-4-4 system, university education for most courses runs for 4 years, with the exclusion of longer courses such as engineering and medicine. In some instances, the 4-year duration can be reduced through taking up trimesters as opposed to the traditional 2 semesters per academic year. University education in the country is split into public and private, which is similar the world over. The latter is largely government-funded through the Higher Education Loans Board

(HELB) and the Constituency Development fund, a kitty set up to avail funds for each constituency in the country for a variety of causes including infrastructure and education bursary provision.

There are a number of polytechnics in the country which aid in absorbing the high turnover of students from secondary education, especially those who fail to attain cut-off points required for university entry. Over the last 10 years, the number of tertiary institutions has increased dramatically, with colleges and polytechnics operating as university colleges. The most famous is the Nairobi-based Kenya Polytechnic, now known as the Technical University of Kenya, which specializes in offering technical courses.

The involvement of tertiary institutions in research and innovation to drive the Kenyan economy forward has gained more popularity in modern times. Jomo Kenyatta University of Agriculture and Technology has been involved in a number of projects both in partnership with the Government and non-governmental institutions. As such, it has placed itself at the forefront not only in the provision of academic training but also in ensuring development of competent individuals and the provision of practical solutions that go beyond academics. These will be discussed in a later section within this report.

Costs and Financing

The cost of education in Kenya across all level of learning has over the years deprived the population an opportunity to enjoy education as a basic human right to all. In 2003, the Government of Kenya under then President Mwai Kibaki made primary education free. This

increased the intake rates, translating into increased turnover rates into both high school and tertiary institutions. Public institutions of higher learning are subsidized by the government for students admitted via the non-statutory Joint Admissions Board (JAB) while self-sponsored or Module II students pay a considerably higher amount in terms of fees. On average, public university students incur costs amounting to a total of KES38,000 under the JAB admission compared to Module II students who incur about KES186,000. Private institution students incur instructional fees amounting to about KES300,000, a broad difference.

Financing of higher education in the country has undergone a great degree of transformation, which has seen a great deal of dependence reduction on government funding. In 1994, the government reduced its budgetary allocation to higher learning institutions from 37% to 30%. This in turn led to such institutions seeking alternative means of raising finances for sustenance. These still exist to date, and include the introduction of parallel (or Module II) degree programs, external research partnership establishments and other revenue-generating activities such as consultancy and university press services for publications. HELB was set up in 1995 and at the time, students accepted into universities were eligible to receive, upon application, KES42,000. This amount has increased over the years, to KES55,000 in the 2005/2006 adjustment and upward again to KES60,000 in the 2008/2009 adjustment. The cost of private university education in Kenya has locked out the greater majority of higher education seekers. Key among the reasons for the high fees charged is the fact that such institutions rely solely on fees for their operating revenue, with very few to no alternative avenues. As such, it is upon students to finance all the running costs through fee payments.

Corporate Analysis

About the Institution

The Jomo Kenyatta University of Agriculture and Technology (abbreviated to JKUAT) is a public university located in Kenya, which operates as both a teaching and a research institution. It is among the main universities in the country and ranks among the most recognized institutions of higher learning, similar to the University of Nairobi, Moi University and Kenyatta University. The institution was established in 1978 and was recognized formally as a university in 1994 through the JKUAT Act of 1994. As at January 2016, JKUAT ranked 68th in Africa and 2,866th globally.

Portfolio

Courses offered cut across the board, from certificate and diploma levels to undergraduate and post graduate programs in its academic portfolio. The university offers on-campus learning and has taken advantage of technological advances to offer virtual applications for students as well as virtual learning. Courses offered by JKUAT are nationally recognized, and include architecture, civil engineering, mechanical and material engineering and electronic engineering. These place JKUAT at the fore as an engineering-focused institution.

JKUAT is also renowned for its research activities, centered mainly around agriculture.

However, through its engineering programs the institution has ventured into offering information technology solutions applicable in a variety of fields. These range from school and primary school education provision to projects targeting electoral automation.

Brand Distribution

JKUAT's main campus is located in Juja, 36 kilometers from Nairobi. It also has campuses within Nairobi, namely the Karen and Westlands campuses. With a national reach, the university has campuses in Kisii, Kitale, Mombasa and Nakuru. As an institution recognized in Africa, JKUAT has expanded beyond national borders. It has established campuses in Arusha (Tanzania) and Kigali (Rwanda), allowing it to broaden its national as well as regional footprint.

Partnerships

The university has partnered with a number of local and foreign institutions in its activities. Its partnership with the Government of Kenya has seen JKUAT involved in the programming of laptops intended for lower primary school children. This is as part of the Government's 2013 manifesto provision to automate primary education and embrace information technology to cultivate a tech-savvy population. It has also partnered with the Government and the private sector in launching the Nairobi Industrial Technology Park (NITP), a Vision 2030 project. Overseen by the university, NITP is mandated with providing 24-hour support, technical services and business planning support. The project has already yielded the development and assembly of a tractor and a laptop, as well as biogas-run equipment.

Academic partnerships also exist within JKUAT's operations. It has a number of constituent colleges which it supports and which subsequently allow it to expand its presence. These include the Taita Taveta University College, Murang'a University College, Kirinyaga University College, Cooperative University College and the Kenya School of Monetary Studies. Foreign

institutions also partner with JKUAT on a number of research and academic objectives, including Kansas State University (USA), Kaisers Lautern University (Germany), Nagoya University (Japan), Makerere University (Uganda) and Kaduna Polytechnic (Nigeria).

Non-governmental institutions with which JKUAT is in partnership include the Kenya Medical Research Institute (KEMRI) through its biotechnology program. Direct Channel Simbatech Kenya is also on board as a business outsourcing outfit.

Industry Risks

Due to the nature of JKUAT's operation, it is exposed to considerably less severe industry risks compared to business entities. Education is an all-season commodity and as such, there are no business cycles with fluctuations that are enough to destabilize the university's running. With annual nationwide secondary school examinations, there is a constant supply of students willing to join university to pursue higher education and those willing to further their tertiary education in post-graduate programs.

Product obsolescence does not affect JKUAT in the strictest sense. With changes in the demands of the modern job market, the university is forced to periodically review its curricula to ensure relevance and accuracy of information imparted.

Technology is a rapidly changing component of life that is applicable in almost all realms of contemporary education and life. JKUAT is heavily reliant on technology in its service provision and its course content. Keeping its technological investment up to date is critical in remaining ahead of its competition and maintaining its reputation as a leading institution of higher learning.

This is important not just for its core academic performance but also for its technology-reliant partnerships which have been identified.

Institution Analysis

Also known as company analysis in the case of for-profit entities, institution analysis is concerned with the university's sources of revenue and the stability of such identified sources. Primarily, JKUAT relies on fees paid by students each semester to finance its activities. Being a public university, such fees are subsidized by the National Government. Its partnerships also provide income streams, such as research charges and patenting of technology before dispatch to end-users. Since education is unbound by seasonality, revenue from fees charged is the most stable income source. Revenue from research is dependent on the demand for such research. The cost of specialized research such as the kind JKUAT is involved with is more often than not high, requiring heavy financial input. It is therefore imperative that financial output be, at least, commensurate. Where financial yield is below expectation owing to low demand, revenue can fluctuate.

Business Risk

Even though the university is a not-for-profit organization, it is still exposed to business risk.

Business risk in this case will cover operational and financial diversity and regulations affecting its operation.

Operational Diversity

JKUAT has diversified its operations through offering academic training, consultancy on technical aspects and research services. Although the research arm does not supersede its academic core function, it does provide a range of offerings to the JKUAT portfolio.

Additionally, operational diversity is enhanced by the wide geographical presence which the university possesses, with both local and regional campuses.

Financial Diversity

Revenue streams ranging from the traditional university fees to consultancy fees and finances from research ventures provide JKUAT with comparatively superior financial diversity compared to other institutions in the country. The NITP project is set to further diversify the university's financial reach from clientele outside the academic and research circle.

Regulation

The regulatory environment is crucial in ensuring that institutions operate in accordance with the set code of conduct. However, the presence of heavy regulation is detrimental to players in a given industry due to numerous compliance requirements, which may discourage new entrants or diminish existing players' performance. Education in Kenya is regulated by the Government through the Ministry of Education, which oversees overall curricula development. Higher education in particular is regulated by the Commission for University Education, in charge of training and standard upholding among universities. The presence of relatively minimal regulation reduces the level of risk, since the university's academic branch is less susceptible to

potentially contradictory compliance issues. Involvement in research, however, exposes JKUAT to an added degree of risk, since the technical nature of research requires that practicing institutions meet specific standards.

Management Analysis

The running of a learning institution differs from that of a profit oriented organization in terms of management. In the case of the latter, analysis is carried out in terms of financial and operational performance and the degree of risk tolerance or averseness. Since the running of a learning institution is done with consideration of what is best for its students, university management does not engage in risky ventures. In the case of JKUAT, however, its decision to pursue the NITP project in line with the Vision 2030 development project indicates university management's tolerance to risk. The same risk tolerance is displayed with the university's decision to bid for the tender for the primary school laptop Government initiative. The KES17 billion tender for the project was won jointly by JKUAT and Moi University in February 2016.

Financial Risk Analysis

Owing to the nature of the university, its financial records are unavailable to the public. It is therefore not possible to provide details of the institution's balance sheet, cash generation, liquidity and financial flexibility.

Conclusion

JKUAT has gone beyond the traditional view of what an institution of higher learning in Kenya ought to offer. It has established itself as a leading research institution capable of driving the nation forward in line with the Vision 2030 development blueprint. The combination of academic training and innovation-fostering is critical in encouraging out-of-the-box thinking in an ever increasingly competitive global market. The management's approach to risk is has worked to JKUAT's advantage, choosing to venture into pursuits in which the institution's strengths lie, namely biotechnology and various fields of engineering. Investment channeled into the university is therefore set to be properly made use of and directed towards expanding stable activities. Such investment and additional partnerships also have the potential to improve JKUAT's continental and global ranking into the future.