

# Sustainability entrepreneurship education in developing countries: A case of selected universities in the East African Communities

Flaura Kidere <sup>1</sup>, Kezia Herman Mkwizu <sup>2\*</sup>

<sup>1</sup> Pwani University, Kenya

<sup>2</sup> The Open University of Tanzania, Tanzania

\*Corresponding authors' email: [kmkwizu@hotmail.com](mailto:kmkwizu@hotmail.com)



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## ABSTRACT

Sustainability Entrepreneurship Education (SEE) as a concept has received less attention from scholars in developing countries. However, the increased call for use of a sustainability entrepreneurship approach to enhance sustainable development in various projects is increasingly becoming a necessity. This situation calls for consideration of how entrepreneurship education should be delivered, particularly regarding sustainability. Clearly, this would be crucial for the university education system which plays a key role in shaping philosophical underpinnings. In expanding the scope of the phenomenon of sustainability from an entrepreneurship education perspective, this study was motivated to explore SEE with a focus on Universities in the East African Community (EAC). The main objective was to establish the existence of a SEE curriculum in selected universities in the EAC. This paper combines desktop review, quantitative and qualitative methods with the application of descriptive statistics and content analysis. The findings show that management and entrepreneurship lecturers commonly defined SE Curriculum (SEC) as an entrepreneurship education that considers the social, economic, and environmental implications within its context. However, SE curriculum (SEC) is not developed. The outcome implies that there is a need to develop SEC in universities. The recommendation is to improve the entrepreneurship education programs in developing countries.

## 1. INTRODUCTION

Sustainability Entrepreneurship Education (SEE), especially within the tourism field, has been of great interest to many scholars. Some scholars like Alonso-Munoz et al. (2022) have commented that sustainability is the building block of tourism. Tourism as a sector engages in development as indicated in the study by Baloch et al. (2022) that acknowledged tourism development include attracting tourists to a destination. However, Chen et al. (2022) urged that after a decade of education on sustainable development, it is time to reflect on the

engagement of universities with sustainability. Although sustainability is already covered in universities, Kleespies & Dierkes (2022) noted that there is a lack of appropriate curricula for enhancing sustainability entrepreneurship. The United Nations reports (United Nations [UN], 2005, 2015, 2022; 2023; United Nations Educational, Scientific and Cultural Organization [UNESCO], 2005) have also emphasized for various sectors to integrate sustainability in order the present generations' development needs do not to compromise the needs of the future generations. In order to benefit future generations, Lew (2020) insisted that there should be a global awareness of sustainability. Therefore, it is important that the education sector, including universities conducting entrepreneurship programs, embrace sustainability and in particular, Sustainability Entrepreneurship (SE).

Entrepreneurship education exists at the global level and also within Africa. In Africa, Kabongo & Okpara (2010) found that most universities in Sub-Sahara Africa have entrepreneurship courses but few operate university-based entrepreneurship centers, and even fewer offer specialization in entrepreneurship. Kabongo & Okpara (2010) opined that new institutions were in a better position to have entrepreneurship courses and specialization compared to traditional higher education institutions. It is evident that there is a need for developing a curriculum in SE to enhance the understanding of scholars in the phenomenon of SE in universities within the East African Community (EAC) hence, supporting the universal concept of sustainability and the related Sustainable Development Goals (SDGs) stipulated by UN (2015, 2022; 2023). In this paper, the selected universities are limited to Kenya, Tanzania and Uganda due to considering the aspect of accessibility of data during the online data collection stage. Hence, the scope of the selected universities serves as the limitation of this study and give room to future studies to explore other countries within the East African region.

### **Statement of the Problem**

The need for sustainable development is becoming key in all sectors-including the education sector. For the education system to embrace SE is now a major call for scholars

(Kidere, 2018). However, existing approaches and literature seem inadequate in addressing this need. Besides, the creation of a supportive framework and conditions in the education sector in the EAC Universities is also insufficient (Kidere & Mkwizu, 2022).

These sentiments are also reiterated by McGrath et al. (2020) and Minguéz et al. (2021) who indicate that although sustainability studies in developed countries have gained so much attention in scholarly journals, it seems not to be the case for those in developing countries, especially the EAC (Kidere, 2018). Moreover, studies that have investigated the sustainability approach from developing countries' perspective have mainly focused on corporate institutions, agricultural productivity, ethical, sustainability management, climate change, performance and human rights perspective disciplines and less on Sustainability Entrepreneurship Education-SEE (Koasati et al., 2022; Lazaroiu et al., 2022; Nasiche & Ngugi, 2014; Simiyu et al., 2023). Also, other existing sustainability studies seem to have focused on opportunity identification and not necessarily SEE (Progress, 2016).

The scarcity of resources and opportunities has also seen most development partners working with scholars and also outside the education system to emphasize the need for the adoption of a sustainability approach across various project developments. However, different scholars seem to understand sustainability differently. Therefore, there seems to be a need to establish an understanding of the SE approach across different disciplines. The need to expose where the EAC universities are at as far as SEE is concerned, can therefore not be over-emphasized.

### **Study objectives**

This study's main objective was to establish the existence of a sustainability entrepreneurship education curriculum in selected universities in EAC countries. This study, therefore, aims at achieving the following:

- Establish the understanding of sustainability education by different scholars.
- Determine the existence of a sustainability entrepreneurship curriculum in selected universities in the EAC

## 2. LITERATURE REVIEW

### Concept of Sustainability Entrepreneurship Education (SEE)

Although there is lack of a standard definition for sustainability as indicated by Moore et al. (2017), other scholars and reports have provided the definition from various perspectives. For example, sustainability is defined as a concept that can be studied and managed in many scales of time, space and many contexts of environment, social and economic organization (Millennium Ecosystem Assessment Report, 2003). Kidere & Mkwizu (2022) have referred to sustainability as a concept which can be studied and defined in the context of tourism education. Sustainability in the context of tourism education is defined as tourism programs which sustain the changing time and spaces within tourism due to climate changes, technological change or even unexcepted shocks like the Corona Virus Disease 2019 (COVID-19) and the tourism programs are developed, designed and offered by universities to impart knowledge to students (Kidere & Mkwizu, 2022).

On the other hand, entrepreneurship education has caught the attention of many scholars and has different definitions according to the industry (Ratten & Usmanij, 2021). Scholars like Boon, Van der Klink and Janssen (2013) defined entrepreneurship education as being characterized with interactive learning linking business and community initiatives.

This study combines the concept of sustainability and entrepreneurship education and defines sustainability entrepreneurship education as programs that sustain the changing time and spaces within education due to climate changes, technological change, or even unexcepted shocks such as COVID-19. Hence, SEE is an entrepreneurship program that focuses on sustaining the social, environmental, and economic aspects of a business (Kidere,2018). It also implies that these programs are developed, designed, and offered by universities to impart knowledge to students.

### Theoretical Framework

The theoretical framework of this paper is hinged on the Training Engagement Theory (TET). Sitzmann & Weinhardt (2017) as developers of the training engagement theory were

concerned with the processes of training programs. The training engagement theory assumes that there is the integration of temporal sequence and multilevel approach (macro level and within-person level) in examining the processes before training and after training of the programs (Sitzmann & Weinhardt, 2017).

Adding the training concept to the training engagement theory has assisted in examining training programs. Studies such as Kidere & Mkwizu (2022) and Tomovic (2021) adopted the training engagement theory to understand education programs. For instance, the study by Kidere & Mkwizu (2022) was guided by the training engagement theory and found that there was a need to establish sustainability tourism education in universities in Kenya, Tanzania, and Uganda. However, given that tourism activities like other specialized programs are largely entrepreneurial, this study adopts the training engagement theory to guide the analysis in establishing the existence of sustainability entrepreneurship education curricula in selected universities in EAC countries and in particular, Kenya, Tanzania, and Uganda. In addition, the application of the training engagement theory in exploring the existence of sustainability entrepreneurship education is valued at the micro and within- personal level and thus its usefulness in this study.

Interestingly, the study by Stizmann & Weinhardt (2015) proposed a model of training engagement theory integrating macro (goal persistence)-preserving nature and people as well as between-person (motivation to learn), and within-person (self-regulated learning). Equally, this paper's aim was to establish whether this kind of motivation applies to SEE in the universities of EAC.

### **Sustainability Entrepreneurship Education in Universities**

Entrepreneurship education is considered as a way to complement vocational education to assist students in developing career prospects (Huang et al., 2021). In China, Zhao et al. (2021) did a quantitative study and found that entrepreneurship education using the incubation approach has positive outcomes particularly in new venture sales revenue, profit prior to taxation, and employee numbers.

In reference to entrepreneurship education, the study by Ratten & Usmanij (2021) conducted a trends research on entrepreneurship education and found that whilst there are positive sides of entrepreneurship education like self-employment for students, there is a dark side of it due to the fact that not everyone thinks and acts entrepreneurially. Ratten & Usmanij (2021) further noted that although entrepreneurship education exists, there is still a need to improve from the perspective of teaching practices to research on entrepreneurship education since the majority of the studies have focused on entrepreneurship in relation to social psychology and no other fields, particularly sustainability entrepreneurship.

Adding to the views by Ratten & Usmanij (2021), this study was motivated to explore entrepreneurship education from a sustainability perspective, not only for teaching practices but also for purposes of understanding the knowledge of SEE in EAC through establishing the existence of sustainability entrepreneurship education curriculum development in the context of the selected universities in Kenya, Tanzania, and Uganda.

## **Sustainability Entrepreneurship Education in Selected Universities**

### ***Kenya***

Kenya's higher education has entrepreneurship education. Lawver et al. (2018), Mwangi (2011), and Njoroge (2019) confirmed that entrepreneurship is a major contributor to the growth of Kenya's economy. When investigating entrepreneurship education in three (3) Kenya universities, Njoroge (2019) sampled a total of 27 students at the Masters level as respondents and used a descriptive design methodology. The findings indicated that the students from the three universities i.e. the University of Nairobi, Jomo Kenyatta University of Agriculture and Technology (JKUAT), and Strathmore University Business School had a clear understanding of the concept of entrepreneurship. While Njoroge (2019) confined the findings of entrepreneurship education from students' perspective, this study not only considers the concept of entrepreneurship education but includes the concept of sustainability to investigate sustainability entrepreneurship education. It sampled (Deans of schools, Entrepreneurship Lecturers, Deputy vice-chancellors (academic affairs), Heads of Departments of business

department and especially faculties of the selected universities of Kenya as one of the EAC countries.

A similar study by Njambi (2016) was conducted in Kenya to evaluate entrepreneurship education. Njambi (2016) focused on entrepreneurship education as a tool for promoting and developing Small and Medium Enterprises (SMEs). The deployment of a survey design as a methodology approach and descriptive statistics lead to the findings that there was a positive relationship between entrepreneurship education and the growth and profitability of SMEs. However, due to the COVID- 19 pandemic, the study by Mkwizu & Kimeto (2022) highlighted the need for higher education institutions in Kenya to revisit curriculums. This calling is not limited to customer services programs only but could be of great importance for other specializations such as sustainability entrepreneurship programs. Due to this emphasis, this study explored sustainability entrepreneurship education in the context of selected Universities in Kenya.

### ***Tanzania***

Entrepreneurship education exists in Tanzania as confirmed by Kalimasi (2018). The study by Kalimasi (2018) assessed the trends of entrepreneurship education in the formal education system of Tanzania using research method. The findings revealed that the promotion of entrepreneurship education in higher education is high and the strategies are noticeable although the strategies are practiced at minimal levels (Kalimasi, 2018). In fact, the country has a national entrepreneurship training implementation framework to guide entrepreneurship training in Tanzania. However, the implementation within the education institutions is a challenge due to not being well documented (Kalimasi, 2018). This implies that there are challenges in the implementation of entrepreneurship education in higher education including universities. Whereas there is evidence of entrepreneurship education in higher education, there are still limited studies on entrepreneurship from a sustainability point of view.

Other studies such as Mkwizu & Kimeto (2022) noted that due to the COVID-19 pandemic effects, it is crucial for higher learning institutions in Tanzania including universities

to re-visit the curriculums. Revisiting curriculums in higher education such as customer services will ensure skills upgrades and development in the post-COVID-19. The emphasis on updating the curriculum in higher education in the study by Mkwizu & Kimeto (2022) was confined to customer services education and therefore, similar studies are needed in order to extend the same to sustainability entrepreneurship education. Hence, this paper's main objective was to establish the existence of sustainability entrepreneurship education curriculum development in the context of selected universities in Tanzania.

### ***Uganda***

Uganda as one of the Sub-Saharan countries is considered as having universities that have entrepreneurship courses and operate university-based entrepreneurship centers with few offering specializations in entrepreneurship (Kabongo & Okpara, 2010). In Uganda, youth between the ages of 15-24 years old face unemployment problems and the unemployment rate is equivalent to 83% (National Curriculum Development Centre [NCDC], 2014). Therefore, some of the reasons for Uganda to embark on entrepreneurship education include the reduction of youth unemployment, increasing numbers of students' enrolments, and a high level of student dropouts (NCDC, 2014).

Oyugi (2021) added that there is a disconnect between academia and day-to-day realities and therefore, advocated for change using the approach slogan "from the ivory tower to entrepreneurial universities" in order to improve the entrepreneurial attitudes of the students. In fact, Oyugi (2021) confirmed that entrepreneurship in Uganda universities is taught as a course unit but there is the persistent problem of graduate unemployment citing reasons such as employer's negative comments regarding the lack of employable skills by university graduates. Whilst Oyugi (2021) advocated for entrepreneurial universities in Uganda, this study focused on investigating sustainability entrepreneurship education curricula in the context of Uganda universities.



### 3. METHODOLOGY

#### Methods Approach, Sampling and Sample Size

This paper utilizes a combination of desktop review, quantitative and qualitative approaches. The desktop review was applied for this paper in order to review relevant literature on sustainability entrepreneurship education in EAC. The reviewed literature were journal articles, books, and conference papers as well as the website for the selected universities. Primary data from key faculty members as the unit of analysis were purposively sampled due to their competence in the topic area of concern for this study. Similarly, there are studies that have applied purposive sampling in research such as Matama & Mkwizu (2021). The chosen universities in this study were public universities and private universities for selected EAC countries namely Kenya, Tanzania, and Uganda only. The remaining EAC countries of Burundi, Rwanda, Democratic Republic of Congo, and South Sudan (EAC, 2022) are not within the scope of this study and therefore, these have been excluded from this paper and can be treated as a study limitation. Apart from the geographical location of these universities being within the East African region but also the aspect of accessibility of data during the online data collection stage was considered.

The sample size for this paper was 2 faculty members for each university and thus a total sample of 12 faculty members who were contacted by email and upon consent were distributed with a survey questionnaire via email. The online email survey was suitable and time effective. The selected universities for this study are (University of Nairobi, Amref international university, Daystar University, and Pwani University) in Kenya; University of Dar es Salaam Business (UDBS) in Tanzania; Makerere University Business School (MUBS) in Uganda. See Table 1.

**Table 1. Sample Size for Faculty Members**

<b>Country/University</b>	<b>Number of Faculty Members</b>
<b>Kenya</b>	
University of Nairobi	2
Amref international university	2
Daystar University	2
Pwani University	2
<b>Tanzania</b>	
University of Dar es Salaam Business (UDBS)	2
<b>Uganda</b>	
Makerere University Business School (MUBS)	2
<b>Total</b>	<b>12</b>

### Data Collection Instrument

A survey questionnaire with both closed and open-ended questions avails both quantitative and qualitative data to be collected from the respondents thus this paper also applies mixed methods of both quantitative and qualitative (See Appendix 1). The collected quantitative data was analyzed using descriptive statistics. On the other hand, the qualitative data was subjected to content analysis.

### Data Analysis

The analysis was done descriptively in order to avail information in frequencies and percentages which are presented in Tables. The paper used SPSS version 25 to analyze collected quantitative data. In addition, the content analysis followed the processes of coding, summarizing and interpreting qualitative data to avail themes relevant to address the specific objective of this paper.

## 4. RESULTS AND DISCUSSION

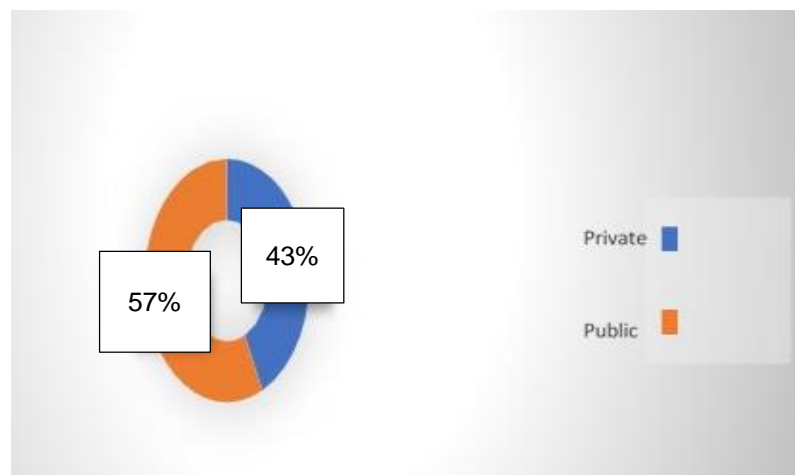
The findings have shown that the respondents being faculty members comprise lecturers in management (42.9%) and entrepreneurship (28.6%) whereas the Monitoring Office and Deputy Vice Chancellors in charge of academic programs both scored 14.3% as shown in Figure 1. This implies that majority of faculty members' roles revolve around management and

entrepreneurship activities under departments of (Business Administration, Business and Economics, Management Science, Health Systems Management, and Finance and Accounting).



**Figure 1. Roles of Faculty Members**

Questionnaires were received out of a total of 12 questionnaires sent out. This represents 43% from private universities and 57% from public universities as summarized in Figure 2. Non-returned questionnaires were mostly from private universities in EAC. This suggests that public universities were responsive compared to private universities on the issue of SE.



**Figure 2. Nature of University**

### Universities Teaching Sustainability Entrepreneurship

The findings indicated that among the responding faculty, 86% of the Universities did not teach sustainability entrepreneurship (See Table 2). This further suggests that these

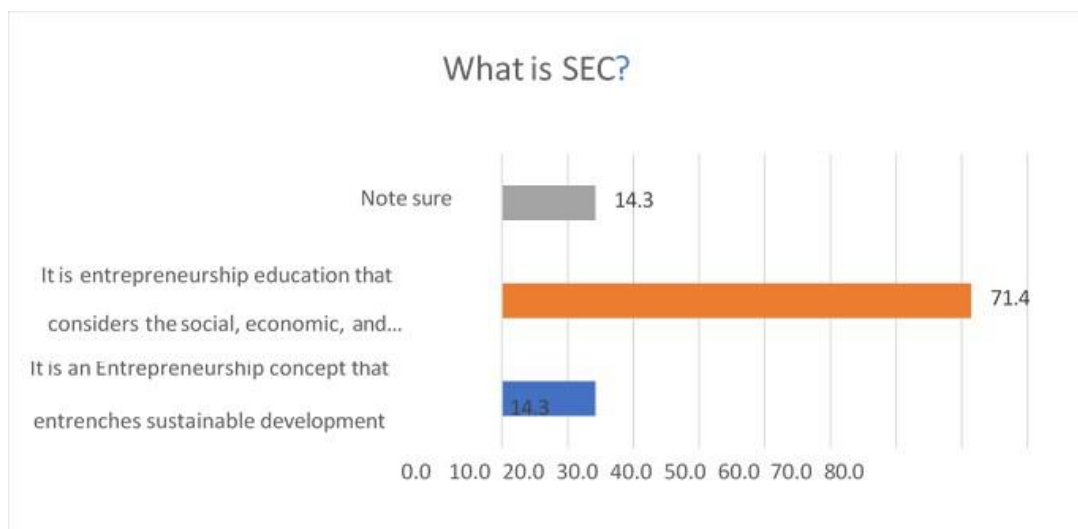
Universities have not yet implemented teaching of SE and that only 14% can acknowledge this compared to the majority who said no.

**Table 2. Sample Size for Faculty Members**

Variable	Percentage (%)
Your University teach SE:	
Yes	14
No	86

### Awareness of Sustainability Entrepreneurship

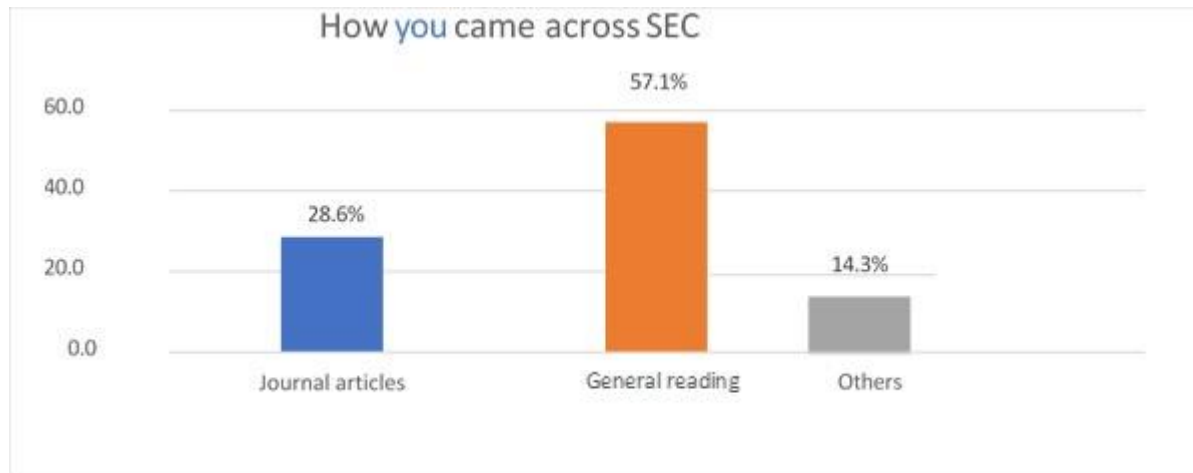
The findings in Figure 3 showed that the majority of respondents (71.4%) understood SE Curriculum (SEC) and thus suggest that SEC is referred by the faculty members as entrepreneurship education that considers the social, economic and environmental implications within its context.



**Figure 3. What is SEC?**

### Origin of Sustainability Entrepreneurship Knowledge

For the origin of SE knowledge in terms of SEC, the findings in Figure 4 showed that most of the respondents learned SE from general reading (57.1%) while 28.6 % got to know SE through Journals. These findings suggest that general reading is a better source of information on SE knowledge particularly for SEC by the faculty members of the selected universities compared to journal articles.



**Figure 4. Nature of University**

### **The Need for Development of Sustainability Entrepreneurship Curriculum (SEC)**

Over 90% of the respondents indicated that there is a need to develop SEC compared to 10% who disagreed as displayed in Table 3. These findings imply that the faculty members are in favor of having SEC in the selected universities.

**Table 3. Need for Development of Sustainability Entrepreneurship Curriculum (SEC)**

Variable	Percentage (%)
Need for SE Curriculum:	
Yes	90
No	10

### **Reasons for Developing Sustainability Entrepreneurship Curriculum (SEC)**

The findings from the qualitative data revealed that there are several reasons which were cited for the need to develop SEC. The availed themes showed that the reasons for developing SEC include the need to “conserve the environment for future generations”, the need to “enhance innovation among students”, “increase consciousness of sustainable development”, to “enable future entrepreneurs to access resources”, “enhance sustainable development while doing business”, “promote creativity”, “help identify societal problems”, and “prepare students for a certain future”.

In fact, one respondent also suggested that;

*“There was no need for having a full curriculum, instead, there should be an integration of this subject into existing entrepreneurship courses as a topic first”*

Furthermore, the respondent had the opinion that;

*“There would be no need to have a full curriculum because many of the University’s academic staff have a limited understanding of this concept. Hence, there was a need to organize Training of Trainers (ToT) programs, to equip academic staff with the necessary skills, knowledge, and exposure to the concept before we proceed to SE curriculum development”.*

## **Discussion**

### ***Establish What Sustainability Entrepreneurship Definition is in Different Disciplines***

Based on the first objective of this paper, the management and entrepreneurship lecturers from the disciplines of Business Administration, Business and economics, Management Science, Health Systems Management, and Finance and Accounting have commonly defined SE Curriculum (SEC) as an entrepreneurship education that considers the social, economic, and environmental implications within its context. These findings show that although the faculty members are from different disciplines and different East African countries but they have a common understanding on how they define SE. These findings support previous studies such as Kalimasi (2018), NCDC (2014) and Njambi (2016) that SE exists in these three countries. For instance, Kalimasi (2018) stated that in Tanzania promotion of entrepreneurship education in higher education is high and this would explain why the faculty members were familiar with the concept of SE. Similarly, for Uganda and Kenya as indicated in NCDC (2014) and Njambi (2016).

In addition, the findings from the different disciplines in Kenya, Tanzania, and Uganda imply that they have come across SE curriculum mostly through general reading followed by journal articles compared other sources. These findings are in line with previous studies by Kabongo & Okpara (2010), Kalimasi (2018), Njoroge (2019), Ratten & Usmanij (2021), and Zhao et al. (2021) that there is existing literature on entrepreneurship. However, these findings are different from Njoroge (2019) due to methodological approach of using students as the unit of analysis while this study used Faculty members who not only understand entrepreneurship but have a common understanding of SE.

Interestingly, the confirmation by the management and entrepreneurship lecturers of the selected public and private universities in Kenya, Tanzania, and Uganda have confirmed that SE is not taught in their universities which suggests that SEC is not part of their teaching programs. These findings are in line with past studies such as Oyugi (2021) which indicated that universities are disconnected from the entrepreneurship aspect and that there is a need to establish entrepreneurial universities.

### ***Determine the Existence of SEC in Selected Universities in the EAC***

The findings on the existence of SEC in the selected universities of EAC imply that all the lecturers who are in management and entrepreneurship have opined that SEC is needed in their universities and some of the reasons were to enhance innovation among students, increase consciousness of sustainable development, to enable future entrepreneurs to access resources, help identify societal problems, and prepare students for a certain future. These findings corroborate with Oyugi (2021) that universities in EAC need to be entrepreneurial, whereby being entrepreneurial mainly focuses on solving societal problems. In addition, these findings support the study by Mkwizu & Kimeto (2022) that recommended higher learning institutions in Kenya and Tanzania to re-visit their curriculums.

## **5. CONCLUSIONS**

This paper concludes that there seems to be an understanding of what sustainability entrepreneurship is amongst the respondents. Despite the understanding of SE by faculty members, this study has further shown that SEC is needed due to several reasons and these are to conserve the environment for future generations, enhance innovation among students, increase consciousness of sustainable development, enable future entrepreneurs to access resources, enhance sustainable development while doing business, promote creativity, help identify societal problems, and prepare students for a certain future.

## **Practical and Theoretical Implications**

The practical implication is for education practitioners to develop and implement sustainability entrepreneurship education when developing curriculums related to entrepreneurship education. Furthermore, education practitioners should engage in sensitizing stakeholders in the education sector regarding the benefits of sustainability studies (sustainability entrepreneurship education) so as to enhance its integration into various disciplines.

From a theoretical implication, it is noted that the use of Training Engagement Theory (TET) may apply in exploring the establishment of sustainability entrepreneurship education curriculum in the selected universities of EAC countries of Kenya, Tanzania, and Uganda due to its emphasis on the practical benefit of education. Although SE is acknowledged, there is need for SEC to be developed in order to benefit the universities as per various reasons provided by the faculty members and this can be enhanced through TET.

## **Conceptual and Methodological Implications**

The findings of this paper provide empirical contribution in revealing that faculty members in the selected universities have a common understanding of the concept of SE and define it as an entrepreneurship education that considers the social, economic, and environmental implications within its context. Furthermore, the development of SEC is needed in these selected universities. This paper also provides a methodological contribution on entrepreneurship literature by expanding the unit of analysis to faculty members in understanding SE.

## **Recommendations**

This paper recommends that Universities in the East African Community develop a sustainability entrepreneurship curriculum, that entrepreneurship educators be trained in



sustainability entrepreneurship and that awareness creation workshops be rolled out to start exposing faculty to this concept.

### Limitations of the Study and Directions for Future Studies

The limitations of this study are on the selection of universities within Kenya, Tanzania, and Uganda. Future studies should expand to cover other countries of the EAC. Also, this being the initial study, the number of Universities selected were few, future study should include more institutions from both public and private universities.

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## 7. APPENDIX

### Appendix 1. Survey Tool

Bio Data

Name

University

Department

Role - Dean, Entrepreneurship Lecturer or Head of Department (HOD)

### Section 2

**Objective 1:** Establish what Sustainability Entrepreneurship (SE) is in different disciplines

Q.1 Have you come across the term sustainability entrepreneurship? Yes or No

Q.2 i) If yes, what is your understanding of sustainability entrepreneurship Education?

- a) It is the same as contemporary Entrepreneurship
- b) It is Entrepreneurship education that entrench sustainable development

- c) It is entrepreneurship education that considers the social, economic and environmental implications within its context
  - d) I am not sure
  - e) I do not know
- ii) How did you come across this term?

**Objective 2:** Determine the existence of SE curriculum in selected Universities in the EAC

Q3. Does your University have a sustainability entrepreneurship curriculum? Yes or No

Q4. If yes, – Which department does it fall under?  
.....

Q5. If No, would you say there is need for the development of this curriculum?  
.....

Q6. If yes, please state reasons why you think this is necessary.  
.....