Training in agriculture as predictor of agripreneurial intentions of agricultural students in Kenyan TVET Institutions

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Abstract

Agricultural education and training have been found to enhance agripreneurial intentions. Favorable agripreneurial intentions, in turn, indicate level of readiness(intention) to engage in agripreneurship. Consequently, agrarian economies, Kenya included, are using agricultural education and training to prepare youth for agripreneurship. However, there are scanty empirical findings on how agricultural education and training at TVET level is preparing Kenyan youth in readiness for agripreneurship. The purpose of this study, thus, was to examine the influence of agricultural education and training at TVET level on students' agripreneurial intentions. The study was guided by the Theory of Planned Behaviour and utilized a correlational research design. Simple and stratified sampling procedures gave 356 respondents from an accessible population of 3190 final year agricultural students. Data was collected using closed-ended and open-ended questionnaires. Piloting and use of inter-item consistency technique yielded a Cronbach alpha reliability coefficient of .928 and .844 for agripreneurial intentions and training in agriculture respectively. The study hypothesis was tested using simple linear regression analysis at .05 level of significance. Statistical Package for Social Sciences version 28 aided data analysis. Qualitative data was analyzed thematically. Findings revealed that the students had high and favorable agripreneurial intentions (M=80.27%) with agricultural education and training predicting agripreneurial intentions (r=.423, R^2=.179, F (1,314) =66.981, p=.000) with 17.9% variance. The study concluded that agricultural education and training at TVET level contributes to agripreneurial intentions formation of final year students studying agricultural courses. It is recommended that educators and policy makers and curriculum planners in TVET institutions promote and strengthen agricultural education and training to enhance students' agripreneurial intentions.

Keywords: education, training, agripreneurial interest, influence, entrepreneurship in agriculture, entrepreneurial intentions

Introduction

Almost every country globally is struggling with inflation, economic recess, and lack of expansion of the economy. The consequences, notwithstanding, include lack of jobs for almost everyone, hence everyone is looking for the next source of income, survival employment, and revenue (World Bank, 2025; IMF, 2024) [61, 21]. Agriculture, after decades of neglect is being targeted in form of agripreneurship to provide decent jobs, revenue, income, economic, political, social, food and environmental security (Shahzad *et al*., 2023) [54]. Agripreneurship is about innovation of an agricultural enterprise, market, service, product, or opportunity to produce something new, add value to something existing that benefits society, create jobs and the results are useful for others to replicate (Sri Wahyuni & Darmansan, 2019) [56]. Innovations in agriculture sector would help solve unemployment crisis, increase incomes and increase food security and reduce food prices. Moreover, entrepreneurship in agriculture is posited to play a catalytic role in reducing poverty among agrarian societies through food security, skill transfer, employment creation, income generation and a decrease in food costs hence agripreneurship is increasingly becoming a subject of interest for scholars and policy makers, especially in Africa and Asia (Mufaro, 2021) [41].

As suggested by (Krueger and Carsrud 1993 & Zhang, 2018) [31, 13]) starting any business is an intentional action. Intentional actions, like agripreneurship, are explained using the theory of planned behavior (TPB) because entrepreneurial intentions precede entrepreneurship (Kickul *et al*., 2009) [26]. Subsequently, TPB has been used successfully to explain agripreneurial intentions and predict agripreneurship behaviours (Alavion, *et al*., 2016; Zakaria *et al*., 2014; Zampetakis *et al*., 2013; Ajzen, 1991) [10, 63, 62, 9]. In theory, an agripreneur cannot just wake up one morning from sleep and instantly start agripreneurial activity without careful prior-planning, fore-thinking and consideration. Agripreneurship, thus, begins with formation of agripreneurial intentions. Entrepreneurial intentions, if present in an individual, greatly enhance the chances of starting entrepreneurship (Raza *et al*., 2018; Per, 1995) [49, 46]. An individual will only venture into entrepreneurship if they show a sufficient level of intent for entrepreneurship (Ambad *et al*., 2021) [5], which is imperative for agripreneurship.

Since evidence existed that entrepreneurs are made not born (Kuratko, 2005) [30], it is the responsibility of society to nurture agripreneurs through education and training. Agricultural education and training enhance agripreneurship interest

through provision of foundational technical and business skills, fostering an agripreneurial mindset, facilitating access to markets and information needed to identify and exploit agripreneurial opportunities (Njura *et al*., 2020) [44]. Teaching of new skills in agriculture education encourages new ideas and strengthening of networks (Amadi & Gibson, 2020). Kenya, before and after independence, has endavoured to prepare the youth for self-reliance in agriculture. However, by mid-1980s Kenya had realized that its education system including agricultural education and training was not equipping the youth with the necessary skillsets and mindset required of agripreneurs to exploit sustainably market-imbalances along agricultural value chains (KIPPRA, 2015) [28]. The graduates from Kenya's institutions had skill deficits and their education and training did not match opportunities demanded in the labour market (G.O.K, 2007) [17], yet approximately 1.3 million youth enter Kenya's labour market annually, out of which 12,000 are from agricultural institutions with youth unemployment rate of 60 percent (Hawkins, 2021) [20]. Agriculture employs 80 percent of Kenyan population but agriculture is still perceived by many youths as a dirty job and a career of last resort (MoALF, 2021a) [40]. Efforts were thus made to rebrand agriculture technical vocational education and training (ATVET) to fill skills deficits and provide education and training that matched actual skills demanded of industry (KIPPRA, 2015, R.O. K, 2018, G.O. K, 2007, R.O.K, 2023) [28, 52, 17, 50]. What informed the government of Kenya to resort to ATVET is that, TVET emerged prior to formal education. In fact, Kenya's emphasis on TVET is in accord with current vision of African countries in developing a new strategy to revitalize TVET (African Union, 2018) [4] and promote ATVET (GIZ, 2016; Sarfo, 2013) [18, 53]. There was therefore a policy shift to transform and strengthen TVET, that included ATVET. The transformation included re-alignment, expansion, revamping, rebranding of TVETs, entrenching of competency- based education and training, market-driven and modular training methods, reforming of governance, assuring of quality of delivery of programmes and linking training to academia and industry (R.O.K, 2023 & Kenya National Qualifications Framework Act, 2014) [50, 27] to match training with available labour market trends, opportunities and emphasize on practical and experiential learning (MOEST, 2012). Moreover, legislative framework, unified framework, validation of curricula by industry, link of ATVET to industry, reforming of examinations and assessments and increased financing by both national and county governments were put in place (R.O.K, 2018; R.O.K, 2023) [52, 50]. Moreover, trainees received entrepreneurship-focused agricultural education and training (Doreen, 2025) [14].

Accordingly, the government of Kenya expected agricultural students to develop the mindset to lift Kenya's agriculture from its subsistence nature to agripreneurial level as supported by Langat (2018) [33] who maintained ATVET trainees were expected to translate knowledge and skills acquired into organizations, markets, products and services of instant use to their surrounding communities. Scholarly work by Dieguez (2018) [13] demonstrated that entrepreneurship education is the basis of cultivating the entrepreneurial spirit in college students. The use of ATVET to enhance agripreneurship has been supported globally as it proliferates agripreneurial intentions (World Bank blog). Moreover, education and training are background factors in TPB. The conceptual framework of the study is displayed in figure 1

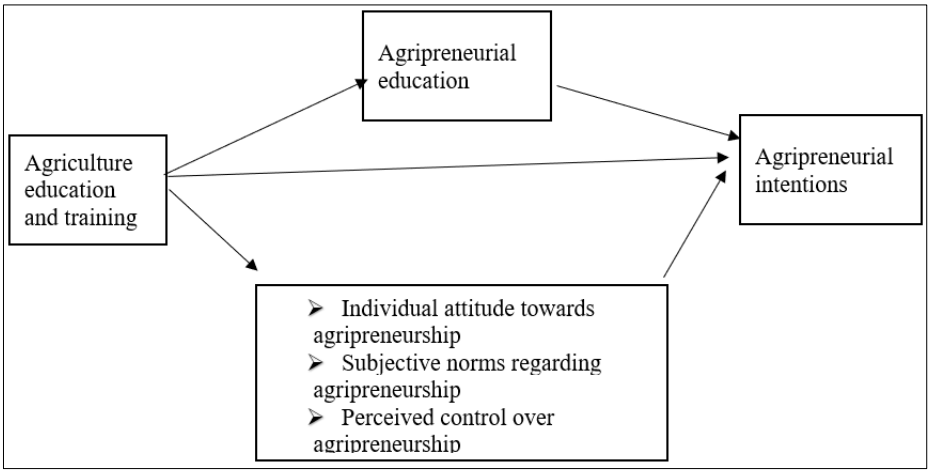

Fig 1: Conceptual framework of the study

The influence of agripreneurial education and the three TPB constructs were presumed to have either enhanced or diminished the influence of agriculture education and training on agripreneurial intentions, their influence was not tested in this study.

Since a decade of revitalizing and prioritizing ATVET in Kenya, there may be a general agreement about the positive direction in which ATVET is moving, but what do we really know about the relative effectiveness of ATVET approach to preparing youth into agripreneurship? Moreover, the question decision-makers, policy makers and planners in the TVET sub-sector ask is "Can ATVET integrated with agripreneurship education and CBET realistically prepare prospective agripreneuring individuals to move Kenyan agriculture to

commercial self-sustaining, profitable and growth-oriented enterprise along agricultural value chain? Furthermore, there are scanty empirical findings which have revealed the influence of exposing diploma, certificate, craft and artisan ATVET students to ATVET curriculum on their agripreneurial intentions. Since agripreneurship is a function of agripreneurial intentions, it is worthwhile to establish whether ATVET predict diploma, certificate, artisan and craft ATVET students' agripreneurial intentions in Kenya. Readiness of ATVET students to adopt agripreneurship is measured using their agripreneurial intentions.

Materials and Methods

The study adopted a correlational research design that targeted population of all agricultural students in TVET institutions who were studying diploma, certificate, craft and artisan modules/levels/programmes. The accessible population was 3190 obtained from Kenya Universities and Colleges Central Placement Service (KUCCPS)database. Questionnaire return rate was 99.2 percent and met all assumptions of linear regression analysis. Simple and stratified random sampling was done and samples segregated according to course/module/programme, year of study, gender and level displayed in Table 1.

Table 1: Accessible population and sample size of the study

Programme/ Course of Study	Year/ Module	Student Populations			Student Sample Sizes		
		M	F	T	M	F	T
Diploma in Agricultural Engineering	3	154	63	238	17	9	27
Dip. in Entrepreneurial Agriculture.	3	56	63	119	6	7	15
Dipl. in general/Agriculture	3	324	191	515	36	21	57
Dip. in Irrigation and Drainage	3	91	38	129	10	4	14
Dip. in agricultural education and extension & Community Development	3	75	63	138	13	9	22
Certificate in general/Agriculture	2	474	422	896	52	46	98
Certificate in Agricultural Engineering	2	26	16	42	3	2	5
Certificate in Agric.& Community development	2	32	28	60	4	3	7
Artisan in Agriculture	2	74	135	209	8	15	23
Craft in Agriculture	2	256	215	471	28	24	52
Craft in Agricultural Mechanics	2	25	34	59	3	4	7
Craft in Agricultural Engineering	2	42	25	67	2	4	6
Craft in Agricultural Technology	2	39	41	80	4	5	9
Craft in Entrepreneurial Agric	2	6	5	11	2	2	4
Totals		1793	1397	3190	197	159	356

Source: Researcher (2025) and Adapted from Kenya Universities and Colleges Central Placement Service (KUCCPS) (2019)

The samples were further allocated to 15 purposively picked TVET institutions per module/course/programme, gender and year of study as indicated in Appendix A. A questionnaire with 13 items that solicited some selected students' demographic information, 30 close-ended items that explored the students' agripreneurial intentions and 19 items that examined exposure to agricultural education and training was utilized. The items that measured agricultural students' agripreneurial intentions were adopted from the instrument developed by Chen *et al*., (1998) [12], Linan and Chen (2009) [37], van Gelderen *et al*., (2008) [58] and Thompson (2009) [57]. The 19 items that measured exposure to agricultural education and training were developed by the researchers from literature reviewed and objective of the study. The instruments were in Likert scale with values ranging from strongly agree to strongly disagree with five highest and one lowest. The overall sum of mean index values obtained from education and training scale were regressed against values obtained from agripreneurial intentions scale. Data collected from focused group discussion (FGD) guide was obtained by use of 7 open-ended questions and analyzed thematically. Legal and ethical procedures for conducting research were carried out including obtaining authorization letters from offices of county commissioner, county governor, Kenya's research granting body, and county education office. At the TVET institutions permission was sought from the principal, or deputy principal or chief executive officer after which samples were composed with the help of the heads of departments and tutor(s) of the various agricultural courses/programmes. The research participants were assembled in a tutorial hall and other convenient places and questionnaires issued to them after explaining ethical, legal and rights issues related to research. The researchers collected the questionnaires after the research participants completed filling. One week after all the questionnaires have been collected, FGD samples were formed from 7 purposively selected students from a chosen TVET institution.

Results and Discussions

The responses to the 19 items measuring exposure to agricultural education and training were scored, summated and the overall mean sum computed and presented in Table 2.

Table 2: Frequencies, means and standard deviations of agricultural students' training in agriculture at a TVET institution

Items	N	Mean	SD
1. I see myself starting agripreneurship shortly as a result of the knowledge of business planning, I acquired in this institution	348	4.26	0.96
2. Skills of business management I obtained in my training in this institution will make it possible for me to start agripreneurship	349	4.46	0.72
3. Agricultural experiences (practices, projects, trade fairs, ploughing contest) I participated in while in college has increased my desire for agripreneurship	347	4.40	0.85
4. Marketing knowledge, skills and competencies I attained during my training in this institution has increased my chances of starting an agripreneurship after graduation	346	4.23	0.84
5. Knowledge and skills on how to identify and pursue viable agripreneurial enterprises acquired through my course in this institution has increased my chances of venturing into agripreneurship	347	4.41	0.74
6. With skills in small business management, I acquired during my training I now firmly see myself venturing into agripreneurship soon	345	4.21	0.90
7. With the agricultural knowledge, competencies, attitudes and capacities I acquired in my course in this institution I see myself practicing agripreneurship after graduation	345	4.32	0.81
8. The experience I acquired from industrial attachment during training in this institution has not prepared me for agripreneurship	344	3.41	1.63
9. With the education and training I have gotten from this institution, if I start an agripreneurial activity, I will have high chances of failing	341	3.59	1.64
10. The technical skills acquired during my course/module in this institution has properly equipped me to start a successful agricultural business	346	4.27	0.92
11. The training on how to network as a business strategy I obtained in this institution has not made starting an agripreneurship easy for me	340	3.40	1.50
12. My training on start-up which I obtained while in this institution has not enhanced my ambition to start an agripreneurship after graduating	341	3.46	1.53
13. Risk assessment skills I obtained during my training in this institution have helped me to view agripreneurship as an alternative venture instead of queuing for salaried employment	347	4.10	1.07
14. Labour management skills I obtained during my training in this institution have not helped me to view agripreneurship as an alternative source of employment	345	3.55	1.50
15. The role models and mentors I interacted with during my training have not made it possible for me to start agripreneurship	344	3.53	1.50
16. With the vocational skills I got during my training in this institution, I am now committed to starting an agricultural enterprise	342	4.27	0.90
17. I see myself implementing my agripreneurial project plans as soon as it is practical	339	4.32	0.89
18. Talks by experts from various Agripreneurial fields during my training have not prepared me for entrepreneurship	347	3.59	1.49
19. Educational experiences I obtained from my training in this institution have diminished my desire for agripreneurship	345	3.46	1.66
ATVET training overall mean sum (max = 95)	350	74.08	12.92

The results showed that the mean index score for educational experiences facilitating desire for agripreneurship (M=74.08, SD= 12.29) was high according to the researchers' categorization in which overall mean index score of 1 to 31.67, 31.68 to 63.35 and 63.36 to 95.00 were considered low, moderate and high respectively. The overall mean sum value of 74.08 was arrived by adding all the mean index values of each of the 19 statements in the scale. High agreements in instrument were achieved with all the 19 statements, with statement 2 having the highest mean, M= 4.46, SD=.92 and statement 11 with the lowest mean, M=3.40, SD=1.50. This showed that business management skills were the most significant educational experience the respondents obtained that would convince them to adopt agripreneurship enterprise. There were 11 statements that had mean index values above four and 8 statements had mean index values of less than four but greater than three. The statement the agricultural students least agreed with was 11 with a mean index value of 3.40 suggesting they were least exposed to networking as an agripreneurial strategy during their training and how to leverage social capital. The findings indicated that most educational experiences the respondents were provided for in the instrument were achieved in varying levels and the students were prepared for agripreneurship courtesy of the said educational exposures. All the 19 items had standard deviation values between zero and two and inference was that the respondents were close in agreement that those educational exposures had enhanced their agripreneurial mindset hence readiness for agripreneurship. The findings of this study confirmed that the various approaches such as subject matter, practicals, projects, simulations, internships, industrial attachment, presentations, academic tours, research, apprenticeship, observations and discussions (R.O.K, 2022) [52] which are used to impart knowledge, skills, attitudes, competencies, and skills on the agricultural students aided in preparing the students to perceive agripreneurship as a feasible enterprise. This finding was supported by information from the

FGD participants that indicated they were ready for agripreneurship courtesy of their exposure to agricultural education and training at TVET institutions.

Responses to 30 items measuring agripreneurial intentions were scored, summated and the overall mean sum computed and presented in Table 3.

Table 3: Frequency, mean and standard deviations of agricultural students' agripreneurial intentions

Items	N	Mean	SD
1. I do not intend to set up an agricultural enterprise in the future	311	4.11	1.36
2. I'm committed to be an agripreneur as sooner as I complete college	317	4.58	2.95
3. Though I fail, I will continue to create my own agricultural enterprises until I prosper	313	4.34	0.95
4. I never search for agribusiness start-up opportunities for now	304	3.34	1.34
5. I'm making every effort to start and run own agriculture enterprise however long it may take me	314	4.37	0.87
6. I'm seriously looking for capital to start an agripreneurial venture	312	4.15	1.02
7. I have fully decided to take on agripreneurship after graduation	304	4.29	0.94
8. I do not read/search books, journals, internet, and not asking friends, experts and family on how to start a successful agricultural enterprise	315	4.42	0.98
9. I do not search for information on how to start a successful agric. Business	312	4.27	1.05
10. I am determined to set up an agripreneurial enterprise not long from now	309	3.94	1.06
11. I have no plans whatsoever to start my own agripreneurial business some day	312	4.03	1.25
12. I'm seriously thinking of starting farm enterprise(s) in the near future	314	4.37	0.81
13. I spend time learning everything about starting agripreneurial project	311	4.14	0.94
14. I have strong intentions to start an agripreneurship one day	312	4.35	0.80
15. My professional goal is to be an agripreneur in the near future	315	4.32	0.91
16. My desire to set up my own Agripreneurial venture is a must	313	4.48	3.77
17. I am really passionate about agripreneurship	309	4.34	0.78
18. I am truly interested in agripreneurship	306	4.33	0.81
19. I am not planning to implement my agribusiness plan soon	307	4.18	1.15
20. I am inspired to start an agricultural enterprise come next year	313	3.75	1.07
21. I am eager to start an agripreneurship project after graduation	314	4.07	0.89
22. I have decided I will start an agripreneurial organization some day	316	4.09	0.89
23. I really wish to start an agricultural enterprise shortly	305	3.77	1.04
24. My hope is to start an agricultural enterprise in a short while	311	3.91	1.07
25. It is desirable for me to start agripreneurship in the near future	304	4.14	0.84
26. I anticipate a lot of challenges when I engage in agripreneurship	297	2.69	1.35
27. I predict that one day I will set up my own agripreneurial enterprise which I intend to grow to a corporate entity	311	4.52	0.75
28. I am preparing to start a viable agripreneurship project as soon as possible	311	3.93	0.99
29. I am not determined to engage in agripreneurship in the near future	315	4.04	1.33
30. I am serious about starting an agricultural business sooner than later	317	4.25	0.93
Agripreneurial intentions overall mean sum (max = 150)	319	120.41	14.99

The results in table 3 indicated that high overall mean index score (M=120.41, SD=14.99) according to the researchers' classification in which overall mean index values between 1 to 50, 51 to 101 and 102 to 150 were considered low, moderate and high agreement in agripreneurial intentions respectively. There were 14 statements with standard deviation values more than one and 16 statements had standard deviation values less than one. The standard deviation is considered low an indication high agreement. The standard deviation reflects how close the entire set of data is to the mean value. Standard deviation equals to the square root of variance. The standard deviation provides an indication of how far the individual responses to an item vary or deviate from the mean, thus indicating the concentration of scores around the mean (Greenbook.org., 2013) [19]. Standard deviations thus reflect variation in agreement among respondents. In this study, there were more respondents who closely agreed than those who varied in their agreement on the items provided.

The results were similar to those of graduating agricultural students (Ismail *et al*., 2020) [22] but in contrast to findings by Aisha *et al* (2020) [2] who established medium agripreneurial intentions among post graduate agriculture students in Kashmir. The results showed that respondents are ready to adopt agripreneurship enterprises when they graduate from their institutions. Only 7 statements returned mean index values below 3. The high overall mean index score in agripreneurial intentions reflected the student's self-acknowledged conviction, a conscious and sure plan to start a business even if inevitable conditions cause delay as espoused by Thompson, (2009) [57]. The statement the agricultural students least agreed with was 26 with a mean index value M=2.69, SD=1.35 indicating the respondents expect lots of challenges if they ventured into agripreneurship. There is need for the policy planners and makers to tap on this readiness and design programs to get these graduates into agripreneurship. The high overall mean index scores indicated a high possibility

of the students engaging in agripreneurship even if other factors delay the process.

Simple linear regression analysis was used to test if the predictor variable (agricultural education and training) explained the outcome variable (agripreneurial intentions).The regression model took the form: $Y= \beta o + \beta_1 X_1 + \varepsilon$ where Y is agripreneurial intentions (dependent variable), βo is a constant, X is education and training in agriculture, β_1 is regression coefficient or change induced in Y by X and ε is the standard error of the estimate. The results of the test are summarized in Tables 4 and 5.

Table 4: Model summary of regression between education and training and agripreneurial intentions

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.423[a]	.179	.176	12.39938

Results in table 4 indicated Pearson correlation coefficient r=.423 that represented the standardized line of best fit for the model. The findings showed a moderate cluster of data points around the line of best fit of correlation between agricultural education and training and agripreneurial intentions as presented in figure 2.

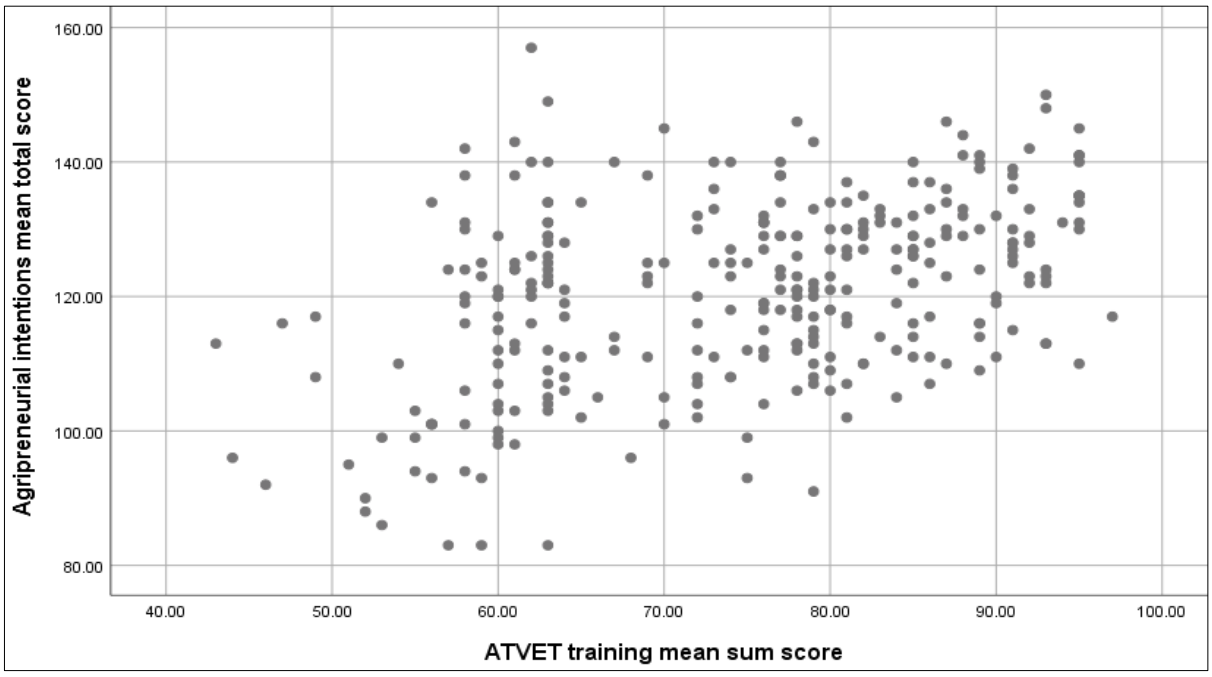

Fig 2: Distribution of scores in scatterplot

The prediction would hence be expected to be medium. R^2 =.179 gives a variability of 17.9 percent in agripreneurial intentions that is explained by exposure to agricultural education and training, the remaining 82.1 percent of variance cannot be explained by the model. The adjusted R^2 is .176 (17.6 percent) which is close to R^2 implied the results of this study are generalizable to the population of study. Coefficient correlations of regression between agricultural education and training as predictor of agripreneurial intentions are presented in Table 5.

Table 5: Coefficient correlations of regression between agricultural students' training in agriculture and students' agripreneurial intentions

Scale	Unstandardized coefficients		Standardized coefficients	t-value	*p*-value
	B	Std. error	Beta		
Constant	86.146	4.295		20.056	.000
ATVET training	.465	.057	.423	8.183	.000

$r = .423$, $R^2 = .179$, $F(1, 314) = 66.981$, $p = .000$

The beta value of .423 as shown in Table 5 is significantly greater than zero. The calculated F value of 66.981 is greater than table value of 3.84 indicating the prediction is significant. Overall, the results showed that the utility of the predictive model was significant, $F(1,314) = 66.981$, $p<.00$. Agricultural education and training explained a large amount of the variance between the variables (17.9 percent). The results showed that agricultural education and training was a significant predictor of agripreneurial intentions ($\beta= 8.183$, $p<.000$). Generally, this regression did a moderate job of modelling agripreneurial intentions of diploma, certificate, craft and artisan agricultural students at TVET institutions in Kenya as explained by agricultural training. The regression test results show that the relationship between students' training in agriculture and their agripreneurial intentions was positive and moderate (r = .423 according to categorization by Leedy and Ormrod (2005). The regression coefficients of .465 and .423 were significantly larger than zero pointing to significant effect sizes. Findings

further showed that the independent variable (students' education and training) in the model contributed to the prediction of their agripreneurial intentions. The estimated model was therefore: predicted students' agripreneurial intentions = 84.146+ .465X ±.0570(84.146 = constant, X = agricultural students' training). The null hypothesis of this study was thus rejected and concluded that agripreneurial intentions of agricultural students at TVET institutions is influenced by the students' training in agriculture. The model shows that the predictor variable (agricultural students' training at TVET) was statistically significant, R^2=.179, F {1,314} = 66.981, p=.000. The findings also indicated that the predictor variable had positive values, an indication that the students' agripreneurial intentions had positive association with the students' education and training. It infers that an increased exposure to agricultural training leads to increased agripreneurial intentions. This point to a positive linear correlation between training in agriculture and agripreneurial intentions. The findings of this study justify the government of Kenya initiative of using ATVET to bolster agripreneurial intentions with the hope that those intentions are translatable to agripreneurship according to TPB, a robust cognitive-social theory that has been positively used to predict agripreneurship (Zhang, 2018) [13]. The findings of this study indicated agricultural students have positive mindset towards agripreneurship as a result of their interaction and exposure to agricultural education and training in TVET curriculum.

A number of empirical studies have established a link between education and entrepreneurial intent. A study by Aliendan *et al* (2022) [7] found university education had significant positive direct support on entrepreneurial intentions. In a study of 222 young active agripreneurs in Greece, Pliakoura *et al*. (2024) [47] found a link between level of education and training and perception of success in agripreneurship. Success in agripreneurship starts with agripreneurial intentions. Similarly, The World Bank (2025) [60] supported the use of ATVET globally to enhance agripreneurship as it proliferates agripreneurial intention that predict agripreneurship. More empirical studies supported the influence of education and training on agripreneurial intentions (Nafukho & Mansour, 2023; Shah *et al*., 2024; Li *et al*., 2024; Purnima *et al*., 2022; Lashgara *et al*., 2014; Pliakoura *et al*., 2024; Bosompen *et al*., 2017; Musa *et al*.,2023) [43, 55, 36, 48, 34, 47, 11, 42]. A Kenyan study by Karani *et al*., (2024) [24] indicated that an education incorporating technological integration, and agripreneurship skills development enhanced student abilities to make informed decisions to pursue agripreneurship opportunities in agriculture. Moreover, Lang'at (2024) [32] observed a positive correlation between deep investment in TVET and higher rates of transition to employment by TVET graduates.

Deep investments in TVET ensure quality training that lead to properly trained students. In a study by Asiyanbola *et al*., (2024) [8] agripreneurship curriculum significantly predicted students' agripreneurial orientation. Indeed, understanding and leveraging agripreneurial intentions are critical for fostering a supportive environment for agripreneurship growth (Ab Rahami, *et al*., 2024). Scholarly work points to a strong positive correlation between receiving agriculture education and the interest to pursue agricultural activities (Omotesho *et al*., 2020) [45]. In the study by Kaki *et al* (2023) [23], major field of study influenced agripreneurial intentions among undergraduate students. An earlier study by Aaijaz (2009) [1] established the use of entrepreneurship study programme and role of the university increased student inclination towards entrepreneurship. Overall, agricultural education at TVET level increased the intention of agricultural students to become agripreneurs.

Thematic analysis from non-verbal and verbal language of FGD participants supported the quantitative findings of this study. The emerging themes from FGD indicated that the various aspects of training helped to focus the trainees on venturing into agripreneurial ventures. The findings point to a firm foundation imparted on the participants in readiness for adoption of agripreneurship. The FGD subjects appear to have the technical, vocational and soft skills required to enable them deal in agripreneurship. When the FGD participants were asked if they could recommend agripreneurship to a friend, 90 percent participants agreed that they would recommend agripreneurship to somebody. They were further asked to rate the strength of their recommendation in a scale of very strong, undecided, somehow strong and weak respectively. Two FGD participants (33.33 percent) rated strong, four (66.7 percent) rated very strong. There was no participant who rated undecided, somehow strong and weak. This finding showed an overwhelming conviction that the FGD participants, not only liked agripreneurship but approved it for others. This finding is in support of the overall findings from the quantitative study that the students had favorable agripreneurial intentions.

The FGD respondents were thus requested to state their major immediate post-graduation plan/option/choice/strategy. Three FGD respondents (50 percent) indicated they would start agripreneurship in poultry production. In Kaki *et al*., (2023) [23] study in Benin, 44.16 percent of the participants were willing to start agricultural enterprise after graduation, but preferred agro-processing. Two FGD respondents (33.3 percent) indicated they would further their education; one at diploma and one did not state at what level. One (33.3 percent) indicated that they would work as they learn, that is: expand an existing agribusiness project and at same time continue with further education at bachelor's degree level. There was no student who mentioned volunteer work, queuing for a job, and joining family business. The fact that no respondent mentioned queuing for a job indicated that they were aware about the present scarcity of paid jobs in the job market in Kenya. Overall, half of the FGD participants would further education and another half would start agripreneurship venture. This may have solved halfway the problem of having many youths queuing for employment in Kenya. The findings contrasted those established by Koggalage and Desilva (2020) [29] in which level of education did not influence entrepreneurial intentions of undergraduate students. It is recommended that the government of Kenya, non-governmental organizations, policy makers, policy planners, and development partners in agripreneurship take advantage of the students' favourable

agripreneurial intentions to transform agricultural sector for the benefit of the would be graduates of agriculture and national economy. The findings point to early promising prospects of the direction and role of ATVET in preparing students for the agricultural transformation envisioned in Kenya's Vision 2030. A follow-up study on how many of the graduates implemented their agripreneurial intentions may act as a feedback for TVET institutions and policy makers to assess and re-evaluate specific aspects of the curriculum to put more emphasis or enrich to effectively enhance their students' propensity to become agripreneurs. A tentative conclusion is that ATVET is a worthwhile workforce development programme.

Agricultural learning experiences in which students had wide range of agreements as indicated by standard deviations of 1.5 or more included industrial attachment, networking, start-ups, labour management, influence of role models and exerts and technical and vocational training. There was need for curriculum planners to revisit these aspects of training with aim enriching and improving. Industrial attachment need not be mere production of a report but involve hands-on innovative activity. The training institutions ought to deliberately link the trainees to helpful networks, mentors and experts based on area of interest to each trainee. On labour management, each TVET institution ought to have a business in which trainees are attached in course of training to learn practically how to manage labour or if that is not possible the trainee be attached to a nearby farm.

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