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The Role of Entrepreneurial and Business Skills on the Performance of Ethiopian SMEs Engaged in Urban Horticulture Production

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Abstract

The study examined the effect of entrepreneurial and managerial competencies on the growth and sustainability of small Urban Agriculture (UA) businesses in Ethiopia. It also tested whether the political environment moderates the relationship. The research followed a mixed research design where quantitative data was adopted to test hypothesised relationships and describe respondents' perceptions of entrepreneurial and managerial competencies; and quantitative results were elaborated using qualitative data obtained from interviews and documents. Data were collected from a purposively selected sample of 300 respondents, and 250 useable responses were analysed using the Smart PLS4 algorithm. In addition, a content analysis technique was applied to analyse data from interviewees. Analysis results indicate that skills related to financial management, marketing, networking, opportunity seeking, and environmental consciousness have a significant positive effect on the growth and sustainability of UAs; and the political environment did not moderate the relationship. This implies that entrepreneurs in the UA sector and stakeholders should work on enhancing the managerial skills of UA participants towards attaining sustainability and growth objectives.

Keywords: Managerial Skills, Entrepreneurial Competency, Urban Agriculture, Marketing, Finance, Political Environment

Background of the Study

Urban agriculture (UA) refers to the cultivation, processing, and distribution of agricultural products in urban and suburban settings (Mougeot, 2000). Commercial urban agriculture (UA) is a growing economic sector that offers opportunities for improving food supply, health conditions, local economy, social integration, and environmental sustainability for cities and towns. It plays pivotal roles in poverty reduction, food security improvement, urban waste management and recycling, urban greening, and job creation in the area (Brinkley, 2012). It is also recognised as a means of attaining the global Sustainable Development Goal (SDG) of the UN, Agenda 2063 of Africa, and the ten-year economic prosperity plan of Ethiopia.

Despite its growing importance, UA is the most neglected economic activity in Ethiopia (Yalew, 2020). In particular, there has been little or no intervention to improve the management practices of UA operators in Ethiopia. By their very nature, small businesses (including small UAs) are subject to failure because of mismanagement. Beaver and Jennings (2005) identified managerial factors that contribute to the failure of small businesses, such as inadequate accounting systems, poor location, lack of marketing skills, lack of a capital budget, inadequate provision for contingencies, lack of management skills, excessive inventory, incompetence, lack of experience, poor record keeping, reckless money management,

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lack of formal planning, insufficient marketing talents, indifferent employees, and inability to cope with growth.

The Government of Ethiopia has been taking various actions to improve the performance of Micro and Small Enterprises (MSEs), including small UA. Similarly, NGOs, research institutes, and other stakeholders have been offering technical and financial support to these MSEs. However, all support activities have not sufficiently addressed the gaps related to managing MSEs.

Based on this, the study argues that urban agriculture, if properly managed, can contribute to the attainment of goals of ending hunger, ensuring food security, and protecting and beautifying the environment. It means that entrepreneurial competencies/behaviours and managerial skills have an effect on the success of MSEs.

Behaviours are meaningful and discrete units of entrepreneurial action which draw upon the experience, knowledge, skills, abilities, cognitions, intelligence, learning, intentions, and motivations of entrepreneurial individuals and teams (Bird & Schjoedt, 2017). Improving entrepreneurial actions facilitate innovation, new job creation, and improve revenue streams (Bird & Schjoedt, 2017). Therefore, the study addresses the following basic questions: Do entrepreneurial competencies influence the performance of youth entrepreneurs in the horticulture sector? How do managerial behaviours influence the performance of youth entrepreneurs in the horticulture sector? What are the challenges and opportunities of urban horticulture production in Ethiopia?

Review of Related Literature

Theoretical Foundation

The transformative business model argues that entrepreneurial firms can achieve success through tailoring products/services to the requirements of customers, implementing strategies that enable them to reduce costs, productive use of valued assets, value-based pricing, collaborative ecosystem, and real-time adaptation to market changes (Ladas Kavadias et al., 2016).

Similarly, the concept of entrepreneurial ecosystems takes the view that entrepreneurial conditions shape the behaviours of entrepreneurs (Fredin & Lidén, 2020). It means that entrepreneurial practices are influenced by interdependent actors and factors such as favourable culture, enabling policies and leadership, availability of finance, quality human capital, venture friendly markets for the product, and a range of institutional support (Stam & Spigel, 2017).

Focusing on creating relationships with partners, novelty-centred business model argues that entrepreneurial firms need to adopt new ways of conducting economic exchange by revisiting their relationships and connecting with previously unconnected parties (Zott & Amit, 2007). Relating this argument to the ecosystem concept, one can argue that entrepreneurial businesses need to have sound relationships with important stakeholders and actors, and that relationship should be revisited to ensure sustainable and successful economic exchange.

Resource-based view argues that entrepreneurial and managerial mindsets, understanding market opportunities, the ability to coordinate with actors and stakeholders, and the overall entrepreneurial action to transform input into heterogeneous output can generate wealth creation benefits for small firms (Alvarez & Barney, 2015). According to the authors, the entrepreneurial process of cognition, alertness, understanding market opportunities, and coordinating knowledge can create distinction among entrepreneurs in the process of creating wealth, and sustain the wealth creation process. The process-oriented ecosystem theory also argued that social networks within the entrepreneurship process are sources of resources such as knowledge, financing, human capital, and market leads (Spigel & Harrison, 2018). Hence, small UA businesses can sustain operations and grow through the proper utilisation of resources within the business and in its social networks.

Factors Influencing the Success of Small UA Businesses

Small businesses in general and small UA businesses, in particular, are influenced by many internal and external factors. Past studies take different classification typologies to group factors influencing the success of small UA businesses. For example, Islam et al. (2009) identified ten factors: an entrepreneur's characteristics, characteristics of SME, management and know-how,

products and services, customers and markets, the way of doing business and cooperation, resources and finance, strategy, external environment, and the Internet. Omri et al. (2015) grouped influencers into three categories: human capital related (i.e., experience, professional proficiency, education, training, and social relations), social capital related (i.e., entrepreneurs social networks), and financial capital related (i.e., accumulation of financial capital). The following sections briefly describe factors influencing the success of small UAs related to entrepreneurial characteristics, managerial characteristics, and external challenges and opportunities.

Entrepreneurial Competencies and Performance of Small Businesses

Entrepreneurial characteristics refer to factors associated with an individual entrepreneur manifested in the form of behavioural traits, competency, or outcome. Entrepreneurial competency has many faces and possible conceptualisations where many different models are grounded. The work of McClelland (1987) has gained popularity in the entrepreneurial competency literature. McClelland identified nine entrepreneurial competencies under three categories: proactivity (initiative and assertiveness); achievement orientation (sees and acts on opportunities, efficiency orientation, concern for high quality work, systematic planning, and monitoring); and commitment to others (commitment to work contract and recognising the importance of business relations). The study by McClelland laid the foundation for defining entrepreneurial competency and identifying its dimensions for later researchers on the subject.

Mitchelmore and Rowley (2010) operationalise entrepreneurial competency in terms of an individual's motivation, personality traits, self-concept, and knowledge/skill. As the authors stated, there are two general perspectives to define competency: competency as a behaviour and as a minimum standard of performance.

Based on the behavioural perspective, Man et al. (2002) identified ten areas of entrepreneurial competencies: opportunity, relationship, analytical, innovative, operational, human, strategic, commitment, learning, and personal strength competencies. The review made by Mitchelmore and Rowley (2010) also identified six competencies: identification and definition of a viable market niche, product innovation based on market needs, idea generation, environmental scanning, taking advantage of opportunities, and formulating strategies used to exploit opportunities. Similarly, Kyndt and Baert (2015) examined 13 behavioural dimensions: perseverance, self-knowledge, orientation towards learning, awareness of potential returns on investment, decisiveness, planning for the future, independence, ability to persuade, building networks, seeing opportunities, insight into the market, and social and environmentally conscious conduct.

Following the behaviourist perspective and recognising the contextual issues related to Ethiopia, the present study operationalises entrepreneurial competency in terms of seven dimensions: orientation towards learning, awareness of potential returns on investment, independence, ability to persuade, building networks, seeing opportunities, insight into the market, and social and environmentally conscious conduct.

Past studies also confirmed that such competencies have an effect on performance of small businesses. They have a direct and indirect effect on the survival, growth, and competitive advantage of small firms (Man et al., 2008). Perceived capability, perceived opportunity, less fear of failure, and entrepreneur's role model are determinants of small business growth (Barazandeh et al., 2015). Risk-taking, self-efficacy, and experience are determinants of profitability (Al Mamun et al., 2016). Competencies such as innovation skills, ability to generate ideas, risk taking, creativity, and envisioning opportunities have a significant positive influence on growth and sustainability (Zizile & Tendai, 2018; Nwachukwu et al., 2017).

Mulder et al. (2007) suggested seven competencies that were rated high by entrepreneurs in the horticulture sector: strategic, opportunity seeking, organising, technical, relational, commitment, and conceptual. Similarly, Morgan et al. (2010) identified farmer and farm-specific factors (education, age, gender, farm physical location, and so on) and relational factors (social relationships and political, cultural, institutional, and commercial conditions) as determinants of performance. Taking the small horticulture businesses in Finland, Eriksson et al. (2019) found the association between six entrepreneurial competencies (i.e., identification of a viable market niche, product innovation, idea generation, environmental scanning, recognising and envisioning taking advantage

of opportunities, and formulating strategies for taking advantage of opportunities) and business model innovation. Based on this, the following hypotheses can be posited:

Hypothesis 1: Building networks with important stakeholders have a positive effect on the growth and sustainability of small firms.

Hypothesis 2: The ability to see opportunities has a positive effect on the growth and sustainability of small firms.

Hypothesis 3: Environmental consciousness of entrepreneurs has a positive effect on the growth and sustainability of small firms.

Managerial Behaviours of Entrepreneurs

For entrepreneurs to succeed, the competencies they possess should be complemented by managerial skills. Eugene Sadler-Smith et al. (2003) argued that managerial practices (i.e., managing performance, managing process, managing stakeholders and environments, managing culture, managing vision, and managing development) have an effect on the growth of small entrepreneurial firms. Again, these managerial practices are best accomplished through the application of such managerial skills as delegation, intuition, managing financial resources, marketing, and planning (Asha et al., 2015). Similarly, according to Sanchez Badini et al. (2018), the survival and growth of small firms are affected by management practices related to accounting and auditing, long-term vision, technological advancement, innovation, legal capability, human resources, commercial/ marketing capacity, auditing, knowledge management, communication, and administration.

In general, prior studies on small business management (e.g. Blankson & Stokes, 2002; Brooks and Simkin, 2012; Abanis et al., 2013; Scarborough & Cornwall, 2019) identified management practices and skills related to managing finance, marketing, operations, human resources, and innovation as important determinants of growth and sustainability. Based on prior findings, the following hypotheses can be posited:

Hypothesis 4: Financial management skills have a positive effect on the growth and sustainability of small firms.

Hypothesis 5: Marketing skills have a positive effect on the growth and sustainability of small firms.

The effect of managerial and entrepreneurial factors on performance is contingent upon many contextual factors. One of the most frequently mentioned factors is the supportive nature of the policy environment, economic environment, and government and other concerned organisations (Suhaimi et al., 2018). Similarly, Pulka et al. (2021) confirmed that factors outside of small entrepreneurial firms significantly moderate the effect of entrepreneurial competencies and business management skills on performance. McClintock et al. (2018) argue that the political environment moderates the effects of entrepreneurial competencies and managerial skills on the performance of small UA. Based on this, the following hypothesis can be posited:

Hypothesis 6: The political environment in Ethiopia moderates the effect of entrepreneurial and managerial competencies on the growth and sustainability of small horticulture firms.

Conceptual Framework

Fig. 1 presents the relationship among the variables of the study.

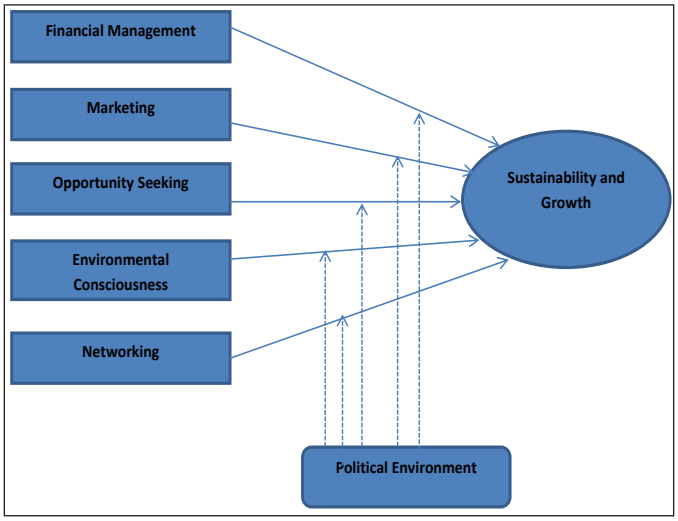

Fig. 1: Conceptual Framework

Methodology

Research Design

The study adopted a mixed research design to quantitatively test the proposed relationships, and to elaborate quantitative results using qualitative data. Characteristics of respondents and how respondents perceive the entrepreneurial and managerial competencies were described using number, percentage, mean, and standard deviation statistical techniques. The hypothesised relationships between variables were tested using Structural Equation Modelling with the Smart PLS4 algorithm.

Data Types and Sources

The study involved both primary and secondary data. Primary data were collected from 250 owners and/or managers of urban horticulture producers producing fruits, vegetables, flowers, herbs, and spices. In addition, representatives from the Addis Ababa city administration, the Ethiopian Horticulture Producer Exporters Association (EHPEA), and the Ministry of Trade were contacted for interviews.

To identify challenges and prospects, as well as elaborate results obtained from the quantitative survey, relevant documents from small horticulture businesses, government offices, and non-government offices were collected and analysed.

The Population of the Study and Sampling Procedure

Currently, fruit, vegetable, and root and tuber crops are widely produced in all regions of Ethiopia with varying intensity. Participants in the horticulture industry also vary in size between large flower farms owned by foreign companies to small vegetable producers. The study targeted small horticulture businesses in and around Addis Ababa established by youngsters. Youngsters were targeted for two reasons: UA is dominated by young people; and young entrepreneurs usually lack entrepreneurial and managerial experiences.

As mentioned earlier, 300 respondents from 150 small urban horticulture agriculture holders producing fruit, vegetable, and root and tuber crops were involved in the study. The sampling technique was purposive because the study purposively recruits young horticulture product producers.

Data Collection Instrument

A structured questionnaire was used to collect primary data from managers and/or owners of small horticulture producers. Entrepreneurial competencies of small horticulture business holders were measured using seven dimensions (i.e., learning orientation, awareness of potential, independence, building networks, ability to see opportunities, entrepreneurial insight, and social and environmental consciousness) adopted from Mitchelmore and Rowley (2010), Eriksson et al. (2019), and Nwachukwu et al. (2017). Managerial behaviours of entrepreneurs were measured using six dimensions (i.e., financial management, marketing management, managing operations and systems, shared vision, and managing performance) and measurement items were adapted from Eugene Sadler-Smith et al. (2003), Brooks and Simkin (2012), Abanis et al. (2013), and Scarborough and Cornwall (2019).

Perceptions of respondents on entrepreneurial competencies and managerial behaviours were measured using a five-point Likert scale ranging from strongly agree (a 5-point) to strongly disagree (a 1-point). As suggested by Mulder et al. (2007), multiple raters (i.e., owners and managers as well as respondents from different horticulture products) were involved.

In addition, semi-structured and unstructured interview checklists were designed to collect data from officials in Addis Ababa city administration, the Ethiopian Horticulture Producer Exporters Association (EHPEA), and the Ministry of Trade.

Data Analysis

Data collected using a structured questionnaire were described using the number, percentage, mean, and standard deviation statistical techniques; and SEM with

Smart PLS 4 was applied to examine the relationships among independent variables (i.e. entrepreneurial competencies and managerial behaviours) and dependent variables (i.e., entrepreneurial sustainability and growth).

For the qualitative data collected via interview, content analysis techniques were used; and the analysis results were reported together with descriptive and inferential statistical results.

Tests of Reliability and Validity

The reliability of measures or the accuracy, precision, and consistency of measurement items were assessed using Cronbach's alpha (α) and composite reliability assessment techniques. Table 1 presents Cronbach's alpha (α) and composite reliability values of measurement items. The reliability of items in the six variables exceeds the minimum threshold of 0.70 (Hair et al., 2019).

Construct validity of constructs and measures was assessed using convergent and discriminant analysis. Convergent validity, the degree of agreement in two or more measures, were assessed using the correlation results of measurement items, factor loading, and Average Variance Extracted (AVE) (Hair et al., 2019). The correlation results range between 0.53 and 0.94 (Table 2); the factor loadings exceed the minimum 0.5 threshold and most of the items are well above 0.5 (Table 3); and AVE exceeds the recommended 50% criterion (Table 1). Hence, it can be concluded that convergent validity has been established. Secondly, to test how a construct or variable is truly distinct from other constructs or variables, Fornell-Larcker's Test of Discriminant Validity was assessed (see Table 4). According to Fornell-Larcker's Test, AVEs are greater than the squared inter-construct correlation estimate.

Table 1: Reliability and Validity Test

Constructs	*Number of Items*	*Cronbach's Alpha*	*Composite Reliability*	*Average Variance Extracted (AVE)*
Environmental consciousness (ENV)	5	0.807	0.874	0.634
Financial Management Skills (FINMGT)	4	0.839	0.892	0.674
Marketing Skills (MKTMGT)	6	0.813	0.865	0.518
Networking Skills (NET)	4	0.814	0.878	0.642
Opportunity Seeking Skills (OPP)	4	0.826	0.884	0.657
Sustainability and Growth (GRWSUST)	5	0.923	0.942	0.766

Table 2: Correlations

	ENV	*FINMGT*	*GRWSUST*	*MKTMGT*	*NET*	*OPP*
ENV	1.000					
FINMGT	0.560	1.000				
GRWSUST	0.688	0.792	1.000			
MKTMGT	0.685	0.708	0.712	1.000		
NET	0.711	0.631	0.759	0.704	1.000	
OPP	0.630	0.531	0.768	0.665	0.667	1.000

The correlation results range between 0.53 and 0.79.

Table 3: Factor Loadings

	ENV	*FINMGT*	*GRWSUST*	*MKTMGT*	*NET*	*OPP*
ENV1	0.759					
ENV2	0.810					
ENV3	0.775					
ENV4	0.838					
FIN1		0.853				
FIN2		0.800				
FIN3		0.788				
FIN4		0.842				
GRW1			0.792			
GRW2			0.877			
GRW3			0.887			
GRW4			0.866			
GRW5			0.946			
MMT1				0.695		
MMT2				0.654		
MMT3				0.768		
MMT4				0.707		
MMT5				0.761		
MMT6				0.726		
NET1					0.796	
NET2					0.793	
NET3					0.782	
NET4					0.834	
OPP1						0.815
OPP2						0.798
OPP3						0.802
OPP4						0.827

Table 4: Fornell-Larcker's Test of Discriminant Validity

	AVE	*ENV*	*FINMGT*	*GRWSUST*	*MKTMGT*	*NET*	*OPP*
ENV	0.634	0.796					
FINMGT	0.674	0.560	**0.821**				
GRWSUST	0.766	0.688	0.792	**0.875**			
MKTMGT	0.518	0.685	0.708	0.712	**0.720**		
NET	0.642	0.711	0.631	0.759	0.704	**0.802**	
OPP	0.657	0.630	0.531	0.768	0.665	0.667	**0.811**

Results and Discussion

Demographic Profile of Respondents

Table 5: Demographic Profile of Respondents

Item		Number	Percentage
Gender	Male	152	60.8
	Female	98	39.2
Age	18-29	91	36.4
	30-40	107	42.8
	41-50	34	13.6
	Above 50	18	7.2
Education	Primary Complete	43	17.2
	Secondary Complete	87	34.8
	TVET	61	24.4
	Degree	48	19.2
	MA/MSC Degree	11	4.4

Data were collected from 300 respondents in 150 horticulture farms using a structured questionnaire. Of the collected questionnaire, 50 of them were not appropriate for analysis. Hence, 250 (83.33%) responses were used for analysis.

Participants in the horticulture production were both male and female, from different age groups and different education levels. So participants in this study included 152 (60.8%) male and 98 (39.2%) female; 91 (36.4%) between ages 18 and 29, 107 (42.8%) between 30 and 40, 34 (13.6%) between 41 and 50, and 18 (7.2%) above 50. In terms of education level, 43 (17.2%) have completed primary school, 87 (34.8%) completed secondary school, 61 (24.4%) completed TVET, 48 (19.2%) have got their first degree, and 11 (4.4%) were MA holders. The respondent characteristics can tell us that the participants in UA have a high potential to modernise and grow their business. As interviewees pointed out, participation of young females and educated people is increasing from time to time. They also mentioned that new university graduates are highly attracted and they are joining the sector through forming associations and partnerships.

Descriptive Results of Study Variables

Table 6 summarises respondents' evaluation of the different entrepreneurial and managerial competencies.

Table 6: Entrepreneurial Competencies

Item	Mean	Standard Deviation
Financial Management Skills	3.71	0.92
Marketing Skills	3.59	0.88
Networking Skills	3.61	0.88
Opportunity Seeking Skills	3.57	0.91
Environmental Consciousness	3.56	0.87
Sustainability and Growth	3.61	0.70

Financial management skills (i.e., financial planning, working capital management, record keeping, and reporting and control) are rated as essential skills for small entrepreneurial horticulture businesses (Mean = 3.71; SD = 0.92). Practically, however, interviewees mentioned that small horticulture producers (i.e., owned solely or in partnership) have no proper recording of financial activities, did not properly account for the costs and calculate profit, there was no financial planning/budgeting, and overall, they showed irregularities in acquiring and utilising the financial resources. The reason for this is that owners and employees in the horticulture business do not have financial planning, and recording and reporting skills, and such businesses cannot appoint permanent employees who have expertise in finance and accounting.

The skills to identify the potential market for horticulture products, create relationships with customers in the identified market, and serve customers with the right product at the right price, and distribution approaches are rated high by respondents (Mean = 3.59; SD = 0.88). Though marketing skills are rated as important by respondents, interviewees mentioned that small horticulture holders lack the skills to identify markets, create networks, decide the appropriate price for their products, and identify alternative distribution platforms. Perishable horticulture products such as vegetables usually perish because of limited market bonding and market access. Small UAs do not have the budget to promote products through traditional communication media such as radio and TV. Their access to technological promotion platforms such as social media and other content marketing strategies is also limited because of members' limited exposure to technology.

Creating a network with other relevant stakeholders, such as financial institutions, government bureaus, NGOs, chambers of commerce, research institutes,

environmentalists, and other stakeholders, is rated as important by respondents (Mean = 3.61; SD = 0.88). Small businesses can get resources and technical support from such networks. However, as interviewees mentioned, entrepreneurs in the horticulture sector lack awareness of possible contacts and means of creating relationships with them. As a result, they have been facing a shortage of working capital and investment capital; they also lack technical support, access to the market, and production input. Though the government and other stakeholders have the initiative to support the sector, their support is limited to solving technical and infrastructural problems, rather than managerial challenges.

Opportunity-seeking, the process of considering, evaluating, and pursuing market-based activities that are believed to grow the firm, is also rated high by respondents (Mean = 3.57; SD = 0.91). In this regard, small UA operators were asked to mention their plan to grow or how they discover new possibilities to grow. They have mentioned a few common possibilities, such as having access to an additional plot of land and capital; and reducing the negative influence of infrastructural problems such as storage, transportation, and communication. From this, it can be noted that small horticulture producers lack the skills of identifying and accessing information sources; they also lack the ability to acquire available information from the general environment, the industry, and the market.

When entrepreneurs make a decision, it is essential to recognise the social, economic and environmental consequences of those decisions (Kyndt & Baert, 2015). Respondents also positively perceive the need for recognising social, economic, and environmental issues in their decisions and actions (Mean = 3.56; SD = 0.87). However, as interviewees honestly disclosed, small horticulture producers do not want to incur extra costs for environmental protection, pollution reduction, and to clean and use polluted water discharged from factories around horticulture production areas. They also added that participants in the sector have less concern for sustainability and give little attention to environmental protection activities. Because of a very compact workspace, the working condition of employees is not healthy.

The sustainability and growth of small horticulture businesses are perceived as positive by respondents (Mean = 3.61; SD = 0.70). In this regard, interviewees were asked how these small firms are performing. Despite the multifaceted challenges that the sector has faced, it is growing in terms of volume of production and sales. Respondents have raised too many challenges: lack of land for expansion, unsupportive government bureaucracy, shortage of inputs (such as seeds, fertilisers, fuel for pumping water, and pesticides), logistics (transportation and warehousing), lack of finance, and lack of technical support.

Hypotheses Testing Results

To examine the extent to which entrepreneurial and managerial skills influence the performance of horticulture businesses in Ethiopia, the study conducted an inferential analysis. In other words, the study examined the effect of financial management skills, marketing skills, networking skills, opportunity seeking skills, and environmental consciousness on the sustainability and growth of small horticulture producers in and around Addis Ababa using SMART-PLS4. Fig. 2 shows the causal relationships of variables. Table 7 presents the hypotheses testing results.

Table 7: Hypotheses Testing

Relationships	*Std. Beta*	*Std. Error*	*T-Value*	*P-Value*
ENV -> GRWSUST	0.226	0.005	42.509	0.000
FINMGT -> GRWSUST	0.232	0.014	16.113	0.000
MKTMGT -> GRWSUST	0.210	0.025	8.420	0.000
NET -> GRWSUST	0.239	0.010	23.861	0.000
OPP -> GRWSUST	0.240	0.009	26.513	0.000
POL -> GRWSUST	0.001	0.002	0.272	0.786
POL x OPP -> GRWSUST	-0.005	0.006	0.872	0.383

Relationships	Std. Beta	Std. Error	T-Value	P-Value
POL x ENV -> GRWSUST	0.000	0.004	0.022	0.983
POL x NET -> GRWSUST	-0.005	0.008	0.831	0.406
POL x FINMGT -> GRWSUST	-0.007	0.009	0.953	0.340
POL x MKTMGT -> GRWSUST	0.015	0.020	0.965	0.334

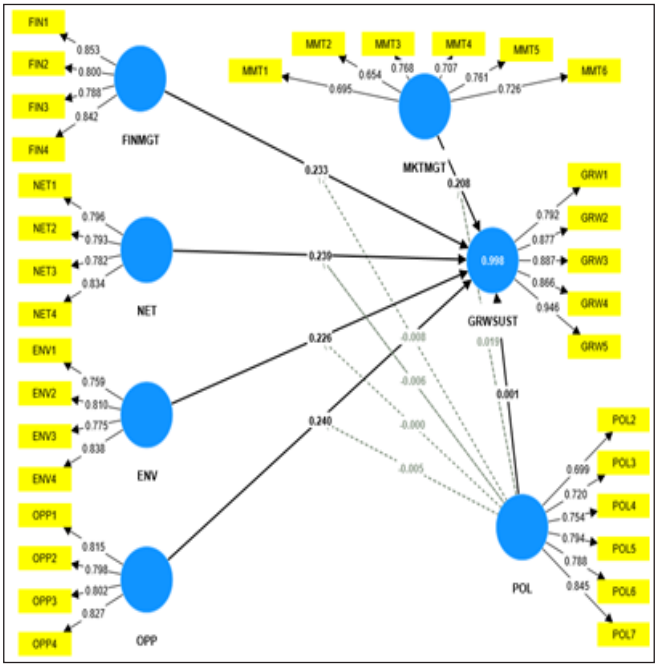

Fig. 2: Causal Relationships of Variables

The structural model reflects the paths in the conceptual framework. The R-square value (R2 = 0.98) shows that the model has high goodness-of-fit. As Table 7 depicted, the dependent variables financial management skills (β = 0.23; p-value = 0.000), marketing skills (β = 0.21; p-value = 0.000), networking skills (β = 0.24; p-value = 0.000), opportunity seeking (β = 0.24; p-value = 0.000), and environmental consciousness (β = 0.26; p-value = 0.000) have positive and significant effects on the growth and sustainability of small horticulture producers. The finding is consistent with a substantial number of prior studies (e.g., Binsardi et al., 2020; Eriksson, 2019; Bird & Schjoedt, 2017; Alvarez & Barney, 2019; Blankson & Stokes, 2002).

The moderating effect of the political environment on the relationship between each of the competency variables and the dependent variable is found to be insignificant. However, the negative effects of financial management interacting with the political environment (β = −0.008; p-value = 0.340), the effect of networking skills interacting with the political environment (β = −0.006; p-value = 0.406), and the effect of opportunity seeking to interact with the political environment (β = −0.008; p-value = 0.0.340) on the growth and sustainability of small horticulture producers imply that the legal, regulatory, and government decisions have unfavourable consequences on the acquisition and use of financial resources, opportunity seeking, and networking with relevant stakeholders. The finding is consistent with studies by Altenburg et al. (2017) and Revell et al. (2009).

Theoretical, Managerial and Policy Implications

Prior studies on UA in Ethiopia dominantly focused on problems related to technical capacity, input availability, and administrative efficiency. The number of studies on the roles of managerial and entrepreneurial competencies for the success of small UAs is very limited. The present study, therefore, can fill this void by examining the effect of entrepreneurial and managerial competencies on the performance of Ethiopian entrepreneurs in the UA sector.

The study confirmed that managerial and entrepreneurial competencies (i.e. financial management, marketing, networking, opportunity seeking, and environmental consciousness) have a strong positive effect on the sustainability and growth of small UAs. Therefore, owners/managers of such enterprises should:

- Establish a system of acquiring, utilising, and managing financial resources in line with their plan.
- Build capabilities related to identifying potential target markets, understanding the requirements of the market, creating strong relationships with customers, and improving their products and services in line with the changing requirements of customers.
- Build and maintain productive relationships with relevant stakeholders, such as government bureaus, financial institutions, distributors, research and training institutes, NGOs, and others, to grow and prosper.

- Continuously discover new ideas to grow.
- Maintain environmental consciousness or continuous scanning of the environment, to identify opportunities to grow and mitigate risks.

Policy makers in Ethiopia give too much emphasis to technical and resource support activities that should be available to small UA holders. However, in addition to such technical and resource support, small UAs need entrepreneurial and managerial skills to properly utilise resources and achieve growth objectives. Hence, policy makers and other government bodies should assist small UA entrepreneurs to upgrade their entrepreneurial and managerial competencies.

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