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# FACTORS INFLUENCING GROWTH OF ENTREPRENEURSHIP IN THE BEEKEEPING SECTOR, MAKUENI COUNTY, KENYA

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#### Abstract

This research investigated the factors influencing the growth of entrepreneurship in the beekeeping sector in Makueni County. Specifically, the project examined the influence of government policy, the culture of the people, the impact of technical support, market accessibility and access to finance on the growth of entrepreneurship. Schumpeter's theory explained the importance of policy, technical support, and financial support on the growth of entrepreneurship. Kirznerian theory underpins how vital policies are for the promotion of a conducive environment for entrepreneurs who are starting off or for growth of enterprises, the importance of access to markets, people's culture, and government policy to the growth of entrepreneurship. Descriptive research design was used to understand the factors affecting entrepreneurship growth in the beekeeping sector in Makueni County. Due to the large geographical area of Makueni County, data was collected from Kibwezi and Kathonzweni. The target population consisted of one hundred and ten individuals. Questionnaires helped to reach all the respondents. The data was analysed using descriptive statistics and inferential statistics by Statistical Package for Social Sciences (SPSS). Descriptive analysis examined the relationship between the growth of entrepreneurship in beekeeping in Makueni County. The

investigation revealed, market access to be the most important for the growth of entrepreneurship, hindered by lack of information on how to access diverse markets leading to growth of enterprises. Fifty-three per cent of the respondents sold their products to neighbours and the local market. They had little motivation to expand their businesses because of the little returns. The study recommends market information should be readily available for entrepreneurs. The government can help entrepreneurs' access external markets by creating networks that link them to consumers.

Keywords: Government policy, people's culture, technical support, market accessibility, access to finance and entrepreneurship growth

#### INTRODUCTION

Several factors affect the growth of entrepreneurship in the community: policy, culture, technical support, markets, and access to finance. The policy governing entrepreneurship affects all the stages. The goal is to ensure that more people become entrepreneurial and can start and grow successful enterprises. In the event of a failure, it does not lead to dire consequences for the individual and their family. Specifically, policy needs to regulate the environment for start-ups, promote entrepreneurship education, provide supporting measures, target specific groups, and provide access to financing and seed capital (Lundstrom & Stevenson, 2001).

Entrepreneurship and culture are closely related. Research by Serrano and Linan (2014), showed the effect culture has on economic development and entrepreneurship in Latin America. The perception that promotes individualism, but social responsibility can lead to the growth of entrepreneurship. Individualism allows people to be ambitious, but they consider building their communities of high priority. The entrepreneurial culture of a society is encouraged through programs and institutions. Entrepreneurial education is essential from an early age. The entrepreneurial training in Kenya has helped shape the view of society, making it acceptable (Robb, Valerio & Parton, 2014).

Provision of technical support leads to the growth of entrepreneurship. Ester (2017) found that the support given to entrepreneurs contributed to the success of Silicon Valley. Forprofit and non-profit organisations offer mentorship, market access, networking channels with other entrepreneurs and access to finance. Incubators offer all entrepreneurs the tools they need to succeed in their ventures. All these strategies protect young enterprises from collapsing. There is an entrepreneurial culture that allows individuals to pursue their passion and accept failure.

Markets provide the opportunities needed for the creation of new ventures. Inefficient firms, flawed pricing mechanisms, imperfectly distributed information characterise today's markets (Cohen, 2007). The business model canvas helps to define the market concept by providing several factors that need attention. These are customer segment, value proposition, customer's relationships, essential resources, key partnerships, revenue streams and cost structure (Hansen, Giglierano & Whalen, 2018). Marketing, therefore, affects entrepreneurship and can be analysed by looking at the access of information available to entrepreneurs, their relationships, and networks with other players in the sector, transportation, and pricing mechanisms.

Without credit facilities, entrepreneurship would not grow. Access to finance has both positive and negative effects on the growth of entrepreneurship. The ease of access to funding increases the chances of improving poor entrepreneurial ventures in the market (Evans, 2015). Access to finance includes the availability of the necessary amount of capital together with optimal terms and conditions (Vega, Manuela, Pietro, Filippo, Alfalla & Rafaela 2017).

Sources of finance could be microfinance, banks, investors, and self-sponsored capital. To access credit, entrepreneurs need to be financially literate. The environmental conditions, for example, the political climate, need to be peaceful. Sadly, many start-ups fail to qualify for credit when compared to seasoned entrepreneurs. If they are eligible, the majority are given less than they need, with unfriendly conditions making it challenging to grow (Newman, Schwarz, & Ahlstrom, 2017). Older, more significant foreign-owned ventures tend to access financial support more readily compared to others. The primary source of finance for many entrepreneurs is informal. From money lenders, family, and friends (Thorsten & Asli, 2006).

Beekeeping in Makueni County is an income generating activity. The study focused on Kibwezi and Kathonzweni, regions with active beekeepers registered by the county government. In the early nineties there were groups registered with over two thousand beekeepers but since then this has reduced to about eight hundred and fifty practising beekeepers. The annual honey has reduced from five tons in the nineties to one ton (Kathila, 2017). This drop is mainly attributed to production inefficiencies, unskilled labour, poor access to finances and extension services (Muriuki, 2016). The growth of entrepreneurship has been low, yet the conditions are adequate there is a honey extraction site in Kibwezi, to encourage modern beekeeping. Beekeeping is part of the history and culture of the area.

# Statement of the problem

Beekeeping as a sub-sector of agriculture, does not have a central policy attention in Kenya when compared to other sectors such as dairy, tea, coffee and horticulture even though vast areas of the country are suitable for beekeeping. Kenya has the potential of producing a hundred thousand metric tonnes of honey yearly. However, it produces only twenty-five thousand metric tons (Government of Kenya, 2010). If the country can increase production, it can satisfy the local demand of, thirty-eight metric tons of honey, and export (Government of Kenya, 2019). Increased production could significantly improve farmers income and livelihood. While there is so much potential in the sector, there are still huge untapped entrepreneurship opportunities. A key issue is to understand why there has been slow growth in the entrepreneurship angle of beekeeping. For beekeeping to develop in Kenya, the entrepreneurship side of it has to develop. However, upcoming generations are abandoning the beekeeping sector, and the uptake of modern technology has been very low (Chemwok, 2016). Research conducted in beekeeping has focused on technology absorption and support from non-governmental organisations (Wambua, 2015). The significant difference between the potential of the country and the actual honey production is an indicator of a problem. Production of honey in Makueni has dropped over the years in the nineties it was five tonnes to one ton (Kathila, 2017). Studies on entrepreneurship in beekeeping is scarce. Strategies have been implemented to improve beekeeping over the years for example the county government of Makueni aims to develop a honey processing plants in Kibwezi and Kathonzweni (Department of Finance, 2018). Modern technology is available to increase production and quality. Regardless of all the progress less people are becoming beekeepers and production of honey is low. Hence the study focused on five factors that influence entrepreneurship: government policies, the culture of people, technical support, access to markets and finance. To understand how they affects growth of entrepreneurship in beekeeping.

Therefore, there is value to look at different aspects that may affect the decisions of people to engage in bee keeping or improve their current bee keeping enterprises. Development of entrepreneurship in agriculture is possible by improving the social, political, economic, and cultural factors that can hinder growth. Secondly, the personal attributes and capabilities of individual farmers need to be developed (Olatomide & Olowa, 2015). All the factors that drive entrepreneurship must progressively improve over time, driven by government policies as well as the private sector. Therefore, this study looks at how these five drivers of entrepreneurship growth affect beekeepers in Makueni County.

# Objective of the study

To determine the influence of market accessibility in the growth of entrepreneurship in beekeeping in Makueni County, Kenya.

#### THEORETICAL REVIEW

The Schumpeterian theory helps us to understand how entrepreneurship growth leads to economic development in a society and the importance of access to finance by entrepreneurs. Schumpeter (1934) stipulated that entrepreneurship comes to an end when an innovation is adopted, and an equilibrium is attained. Entrepreneurship is what drives economies, but this is dependent on the environment. Entrepreneurial knowledge, government regulations such as taxes, tariffs, policies, and cost of innovation affect the uptake of new technology (Backhaus, 2003). The main goal of an entrepreneur is to make a profit from their innovation. Credit facilities are required to exploit the innovations (Evans, 2016). Financial institutions provide the needed capital to ensure the innovations reach the market. A good policy should regulate financial institutions in terms of taxes to encourage and facilitate the introduction of entrepreneurship (Miguel & Maria, 2014). Aghion and Fester (2017), discussed growth policy design and the Schumpeter growth theory. Growth relies on innovation, which results from the development of skills, the search for new markets, research, and development. Schumpeter (1934) showed innovation needs to diffuse into the society to contribute to the growth of the economy. Therefore, in many cases, the markets determine the level of innovation and adoption to new ways of doing things. Schumpeter's theory was important for the study since it emphasises the need for a good policy that promotes entrepreneurship protecting the old technology and making room for innovation. The provision of financial support for entrepreneurs has been brought out together with the effect that culture has on entrepreneurship growth. Another factor is technical support, required for innovations and development of specialised skills.

Kirzner theory of entrepreneurship highlighted that entrepreneurs possess the unique quality of being alert to emerging opportunities from market disequilibrium. The opportunities are perceived and exploited by the entrepreneur to make a profit. Nevertheless, for this to happen, policies that exist need to incite that alertness within potential entrepreneurs. Geloso (2015), conducted a study on Deirdre McCloskey kirznerian growth and the role of social networks. The entrepreneurial success of the western world led to a change in the perception of people about markets, ideas, entrepreneurs, and innovation. Culture can affect the ability of entrepreneurs in society to be alert, what they notice and how they exploit these opportunities. Culture and knowledge about the market process are the primary sources of information that influence the entrepreneur's target. Large social networks contribute significantly to entrepreneurial alertness by providing information quickly and cheaply. The social networks help the entrepreneur focus on what is acceptable in society and will generate profit. This theory helped us to understand the importance of markets being accessible to the growth of entrepreneurship. Availability of market information and social networks can help entrepreneurs identify profit-making

opportunities. Taking note of the culture in society, they can exploit those opportunities that will be acceptable and lead to successful enterprises. It also helps us to understand the importance of policies that promote a conducive environment for entrepreneurs who are starting off or for the growth of enterprises. The kirznerian theory is applied because it underpins how essential access to markets, culture, and policy are to the growth of entrepreneurship.

#### **EMPIRICAL REVIEW**

# Effect of government policy on growth of entrepreneurship

Research targeting entrepreneurial development has focused on policy and their influence on the development of entrepreneurship. Musambanyi (2015), conducted a study in Kitale and Eldoret to identify the climate for entrepreneurship and how it affects entrepreneurship development. Using an exploratory, descriptive research design, they showed that policies try to increase entrepreneurial activities by reforming the regulatory environment this was through the reduction of the number of permits and licences required to start a business. Financial support through loans, tax incentives and subsidies were provided. Skill development was addressed by increasing the number of resources dedicated to business education to create a positive attitude and improve the entrepreneurial skills in the public. How effective the policies are, has not been extensively researched on.

Sambo (2016) conducted a study on factors affecting youth entrepreneurship in Kibera district in Kenya. Using quantitative descriptive design, he analysed the effect of policy and access to credit on entrepreneurship growth. One policy highlighted was the National Youth Policy sessional paper number 3. The policy aims to reduce unemployment among the youth. The policy ensures that all major players within the environment, private, public, and civil society, have opportunities to develop the youth within the country. In turn, the youth are on a fair playing field with older, more seasoned entrepreneurs. The main issue was the lack of information among the youth about the options and opportunities available to them (KIPPRA, 2002).

The situation in Kenya is wanting. Waruguru (2012), conducted an explorative study on whether the youth, women and Uwezo promote the growth of entrepreneurship. The research revealed that the policies do not have all the three components required for entrepreneurial success. The opportunity pillar was satisfied; financial and advisory services are available for individuals. The motivation and skill factor are shallow. The result is necessity-based entrepreneurship prevalent in Kenya once formal employment is made available, the ventures collapse. The two factors address the culture and technical capabilities in society when it comes

to entrepreneurship. The study showed how all these are connected and need to be addressed together for entrepreneurship development.

Government policy within agriculture has motivated entrepreneurs to venture into the sector. The livestock policy aims to address different challenges, population size, trends, and distribution. In beekeeping, this is important, and it allows farmers to know when and where they can set up apiaries for high-quality production of honey. Research conducted has clearly shown the areas with high production of honey. Also, the species and behaviours of bees are well documented (Carroll, et al. 2013).

# Effect of people's culture on the growth of entrepreneurship

Robb, et al. (2014), conducted a case study on Ghana, Mozambique, and Kenya and the effect of entrepreneurial education and training. The study noted the potential in Kenya for entrepreneurship since the Jua Kali sector employs eighty-six percent of the working population. The entrepreneurial culture in Kenya is necessity based. Education contributes significantly because the entrepreneurial training program is broad and repetitive. The background of the recipients is neglected, for example, education, age, experience, and focus. They found that education tailored correctly, introduced at an early age can change the entrepreneurship culture.

Entrepreneurship in beekeeping can be affected by culture. In most African communities, women did not participate in beekeeping. The common reasons were lack of skills, culture prohibiting the climbing of trees, fear of falling from trees, and fear of bee stings (Dike & Onwuka, 2016). Many view beekeeping negatively as being a dangerous, masculine, and unprofitable venture (Mburu & Mbwika, 2015). A negative perception reduces the number of entrepreneurs willing to venture into the sector. Education can help in removing any culture that hinders the growth of entrepreneurship (Brush, 2014). With proper education on beekeeping and the possible financial and health benefits, the sector can improve entrepreneurially.

# Effect of technical Support on the growth of entrepreneurship

Wachira (2017), conducted a study on incubatee selection criteria and its role on entrepreneurship growth, a survey of university-based incubators. He used a survey research design to understand how important incubators are for entrepreneurs and institutions. Incubators contribute positively to entrepreneurship growth. It ensures that entrepreneurial ventures considered are successful. Both private and public universities have started these programs, Chandaria business innovation and incubation centre at Kenyatta University, C4D lab centre at Nairobi University, @ business Africa at Strathmore University, Business/technology incubation unit at the Technical University of Kenya and KCA business incubator at Kenya College of Accountancy University. Entrepreneurs who participate undergo an interview based on their idea, whether it is marketable, profitable, innovative, and beneficial to society. Majority of the incubation centres offer ICT based services. The participants remain in the institution for about two years to learn, and their products are commercialised. The research did not clearly show the success rate of incubatees and life after the incubation period.

In beekeeping, the government and private organisations have provided technical support. The creation of KTBH significantly improved beekeeping. Mbae (2010), conducted descriptive survey research in Kajiado and Mwingi to show the impact of ALLPRO project in developing beekeeping. The primary purpose of the project was to train farmers on the modern ways of beekeeping. Nevertheless, there was low stakeholder involvement, poor communication with beneficiaries. Technical support in the beekeeping sector is inadequate. As a result, beekeeping growth is affected. Other factors that prevent growth are culture and finance. Growth will be possible through training of modern beekeeping practices within counties, availability of quality control services, market, and honey extraction services.

# Effect of access to markets on the growth of entrepreneurship

Lam and Harker (2015) conducted an eleven-year longitudinal study and context-rich interpretive approach on entrepreneurship and marketing in China. The study found that marketing and entrepreneurship are inseparable from the conception stage to the decline stage. Many entrepreneurs were active in creating, building and maintain relationships before starting their businesses. The entrepreneurs were alert to entrepreneurial opportunities from their relationships. These same relationships promised to be future customers and information sources. During the start-up, stage entrepreneurs aimed to maintain their current customer and acquire new market. Their main goal is to grow their ventures, and this requires an expansion of the customer base. The trust between customers and the entrepreneurs grows over time increasing sales. Branding of products also ensured an increase in customers and set the products apart in the market. Participation in international trade fairs and advertisement expenditure opened new markets. The businesses at the decline stage blamed this on the poor product quality, competition, and global economic downturn, which affected the purchasing power of customers. Many of the entrepreneurs used their social connection to make marketing decisions.

Cor (2011) shows how the concept of marketing has changed over the years. Markets have matured with customers becoming more specific about their wants. Three elements are essential in today's market; it has to be customer-specific using the market mix. Include an integrated approach combining the supply, marketing, and the organisation and profitable. Relationships are built and maintained based on customer preferences. The use of technology and the internet has shaped companies in ensuring not only excellent products but also keeping images attractive. Marketing has evolved from a transaction to a customer and market outlook.

Olatomide and Olowa (2015), analysed the factors affecting agribusiness development in Nigeria using descriptive analysis. Marketing was the fifth most effective factor in hindering growth. One reason was that individuals in developing countries do not have autonomy when it comes to the market decision (Kofi, 2002). Information about products and potential market forms part of the marketing factor and is important to instil confidence in pursuing entrepreneurship. The sector needs to be popular; advertising through social media can increase knowledge on the potential of an industry. The entrepreneur needs to be able to engage the market without intermediaries. Access and information about the local and international markets need to be available and easily accessible for the growth of entrepreneurship in a sector.

Without a reasonable market understanding, entrepreneurship growth in beekeeping will stall. Training is an integral part of marketing. Distribution channels, diaspora markets, entrepreneurial networks all these contribute to sales and improvement of products. In beekeeping, the products are in high demand locally and internationally. Information on how to access these markets is a challenge for many due to poor networks within the sector.

#### Effect of access to finances on the growth of entrepreneurship

Oyoo (2016), using a cross-sectional survey research design showed the impact of capital accessibility and growth of SMEs in Migori County. Collateral requirements are a barrier to access to credit, the nature of the business, capital structure, cost associated with the source of finance, and growth of the enterprise. Entrepreneurs are labelled as risky borrowers hence require more collateral and attract closer scrutiny from lenders. Many beekeepers have no access to credit because they lack insurance or the constant flow of income (Chemwok, 2016). Being denied financial assistance limits entrepreneurial beekeeping, many who pursue it look for other sources of income and have limited education (Mbae, 2010). Lack of financial literacy, managerial skills, marketing skills, and absorptive technology capabilities hinders entrepreneurship.

Beekeeping in Kenya is gaining momentum, awareness of the development opportunities, and the need for more players in the sector is clear. Opportunities in the whole value chain of beekeeping are many, natural honey in the market can fetch up to one thousand Kenyan shillings per kilo. New technology within the beekeeping sector has improved the process of maintenance and production of high-quality products (Chemwok, 2016). The sector provides many opportunities for entrepreneurship. The entrepreneurial farmer can take advantage of any of the avenues from assembler, processor, and distributor to local and international consumers (Olatomide & Olowa, 2015).

#### **METHODOLOGY**

# Research design

Descriptive research design was used to understand entrepreneurship in beekeeping in Makueni County (Mugenda, 2008). Descriptive design was ideal as the study tried to understand the factors promoting entrepreneurship growth in the beekeeping sector in Makueni County. Descriptive design helps when the characteristics under investigation are known to exist, and more information is needed (Kumar, 2011). The way access to market, access to finances, technical support, policies, and culture determine the growth of entrepreneurship in the beekeeping sector needs to be understood.

# Target population

According to the county's department of agriculture, there was an estimated 5,100 bee farmers distributed in Makueni County (Department of agriculture, Makueni, 2019). The sampling frame for this study was 366 farmers who were in the county database registered.

# Sampling procedure and sample size

The selected sample of beekeepers was from Kibwezi and Kathonzweni. Adequate sample size can be between 10 %, and 30 % according to Mugenda and Mugenda (2003). As such, thirty per cent of 366 was the representative sample. It brought the sample size for the study to 110 individuals. Simple random sampling ensured that everyone within that criteria had an equal chance of selection (Kumar, 2011).

Table 1 Distribution of sample size

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	County database	No. of registered	Sample size
	sample	beekeepers	
	Kibwezi	202	61
	Kathonzweni	164	49
	Total	366	110

#### **Data collection instrument**

The Questionnaire was self-designed, appropriate for entrepreneurial beekeepers in Makueni County. It helped to collect data because of the wide geographic distribution of the respondents, and they reduced bias. The questionnaire used both closed and open-ended questions. Closed questions were useful since they brought out facts. Open-ended questions help to understand the respondents' point of view (Kumar, 2011). To understand the entrepreneurial environment, we needed to know what was happening and the perception of the actual beekeepers. The information generated provided both quantitative and qualitative data.

# Pilot study

Data was collected from a small group from Kathonzweni and Kibwezi to correct any problems with the questionnaire that might arise when dealing with the target population (Mugenda, 2008). The pilot study conducted gave reliability of 0.77 calculated using SPSS. The value showed that forty-one items within the questionnaire correlated highly among themselves and measured the growth of entrepreneurship (Mugenda, 2008). As such, the questionnaire was used to collect data.

# Validity of the instrument

Validity ensured that the questions asked, effectively measured the objectives under investigation. Content validity measures the degree to which data collected represents a specific concept. Each question was linked to an objective to ensure content validity (Kumar, 2011). According to Mugenda (2008), professionals can be used to check for content validity; one should assess the concept the questionnaire is evaluating the other should look at the set of items and how accurately they represent the concept. The questionnaire was evaluated and approved by officials within the beekeeping institute.

# Reliability of the instrument

Reliability measures the degree to which a research instrument will yield the same results after repeated trials (Mugenda, 2008). Cronbach's alpha measured the reliability of the questionnaire. It helped to understand how all the items in the test measured the same concept. The reliability coefficient is good when it is close to 1.0. generally, when alpha is less than 0.6, then it is considered weak, those around 0.7 acceptable and when it exceeds 0.80, then the questionnaire is reliable (Sekaran, 2003). Alpha was determined using SPSS. Kibwezi (Makueni County statistics, 2019).

# **Data collection procedure**

Beekeeping experts from the two groups helped to collect the data, one based in Kibwezi and the other in Kathonzweni. This was because of the significant distance that needed to be covered. The respondents filled and returned the questionnaires immediately. Ensuring a high response rate and the cost and time required reduced. In case of any language barrier, the local officials were available for clarification.

#### **RESEARCH FINDINGS**

# Government policy and the effect on growth of entrepreneurship

The importance of policy to the growth of entrepreneurship could be seen 75% of those questioned agreed that it was easier to start a registered business now. 75 % of the respondents were positive about the training. 84.8 % agreed that the government had promoted entrepreneurship in agriculture through the media.

From the mean values the respondents were positive on the role the government had played in providing effective policy for the growth of entrepreneurship in beekeeping in Makueni County. However, the statements referring to financial support and training in marketing had a standard deviation of 1.31 and 1.30, respectively. Which is a bit high, showing some entrepreneurs have a hard time accessing these services.

The study agrees with Waruguru (2012); the opportunity pillar was satisfied, financial and advisory services are available for individuals such as capital, information, counselling, and advisory services. Some entrepreneurs were not able to access financial support, which supported, Sambo (2016) who ascertained that one major issue for entrepreneurs was lack of information on the support provided by the government.

# People's culture and the effect on growth of entrepreneurship

The effect of culture on the growth of entrepreneurship in beekeeping in Makueni county can be seen. 78.6 % of the respondents confirmed that entrepreneurship is popular in the community. 92.9 % were positive about the profitability of beekeeping sector. 66.1% of respondents showed that collaboration between the stakeholders in the sector was high. 70.5 % of the respondents indicated that there was great support from family members, and 70.6% confirmed the positive influence of beekeeping organisations within the community.

A few of the respondents took up beekeeping influenced by the community. However, from the standard deviation of 1.60, the impact is not the same for all of them. Family support for entrepreneurship in beekeeping is substantial since the mean is below 2.0. From the data, there was a good relationship between the beekeepers and the beekeeping organisation. In line with Brush (2014), that culture in a community can influence the interactions between stakeholders and the adoption of new technology. Robb, et al. 2014, stated if the community accepts entrepreneurs, views them positively, then it will flourish and be prevalent. It can be seen from the positive view many of the respondents had on the profitability of beekeeping and support from family. Culture is one of the major hindrances to entrepreneurship.

# Technical Support and the effect on growth of entrepreneurship

Majority of those who participated found practical support to be necessary for the growth of entrepreneurship. 85.8% concluded that networking among the entrepreneurs and other stakeholders such as extension officers would have a high impact on the growth of entrepreneurship in agriculture. 73.3 % of the respondents strongly agreed that infrastructure, such as roads and the internet, was very important for the growth of entrepreneurship.

The mean values showed a consensus that technical support is necessary for the growth of entrepreneurship in beekeeping. It was defined as the provision of modern equipment, collaborations, infrastructure, skill development classes and availability of extension officers in the field. The low standard deviation in each point showed that the respondents did not differ in their opinions. It was supported by Mbae (2010), who pointed out how low technical support was for beekeepers. A secure link between technology development and other actors in agriculture is needed.

# Access to markets and the effect on growth of entrepreneurship

78.5% of the participants considered access to markets challenging. The challenge that affected the respondents most was lack of training and information. We found that 91.1 % of the respondents agreed that training in marketing was relevant. 90.2 % of the respondents had little knowledge of how to access different markets and so were limited to selling their honey locally. 53.6 % of the respondents sold their honey to their neighbours and other local consumers.

Table 2: Markets for entrepreneurs in Makueni County

	To whom do you sell your honey	
	(%)	
Self	7.1	
Local Market	11.6	
Neighbours and other local	53.6	
consumers		
Middlemen	6.3	
Kibwezi Honey Factory	8.9	
Consumers in urban areas	8.9	
Total	96.4	
No response	3.6	
	100.0	

The means were below 2.5, much lower than the theoretical mean of 3.0. The respondents agreed with the statements that information about various market opportunities was scarce and getting market for their products was a challenge. The standard deviation was low for three statements: availability of information of international markets, sale of products without the use of intermediaries and marketing in training for skill development of entrepreneurs, showing a general agreement across all respondents.

The standard deviation was high for access to markets is a challenge, and information about market trends. It showed the different opportunities available for entrepreneurs in the same area and sector which can explain why some enterprises were more successful than others. Information about markets needs to be accessible by entrepreneurs for their enterprises to grow. The literature review supports this since one major factor that hinders entrepreneurial growth in agriculture is marketing (Olatomide & Olowa, 2015). For any venture, information from the market is vital to discover opportunities and take advantage of them. Knowledge about the consumers and their specific requirements also ensure growth (Lam & Harker, 2015).

Table 3: Distribution by mean of factors contributing to access to market

	Mean	Std Deviation			
Access to the market is challenging for many	1.77	1.194			
entrepreneurs					
Many entrepreneurs in beekeeping are not familiar with the	1.40	0.725			
international market and how to access it.					
Many entrepreneurs in beekeeping can sell directly to	1.29	0.550			
consumers without intermediaries.					
Information about beekeeping products, trends, and tastes	2.09	1.363			
of consumers is not readily available for entrepreneurs in					
beekeeping.					
Marketing should be included in training for entrepreneurs	1.31	0.719			
in beekeeping.					

# Access to Finances and the effect on growth of entrepreneurship

95.4% % of the participants, agreed that if access to financial credit were readily available, then it would be easy to grow their venture. It is because 72.9% showed that the capital needed to start and grow a successful enterprise was high. Sources for capital for beekeepers were not readily available because 71% of the respondents lacked a constant flow of income or collateral.

The means showed that the participants were positive about the statements affecting financial credit. The standard deviation though indicated that ease of access to finance was subjective. Some individuals did not see it as an obstacle. Some have other commercial

activities, have been entrepreneurs for more years, and are older. It supported Mbae (2010), he explained that a successful entrepreneurial beekeeping venture required financial backing, which was not available from banks, due to steep borrowing rates and collateral requirement. The bank rates on loans encourage entrepreneurs to seek capital from savings or family, limiting the expansion of ventures (Robb *et al.* 2014).

# The growth of entrepreneurship in beekeeping

The potential for beekeeping entrepreneurship is clear, 93.5 % of the respondents agreed that beekeeping could be a source of income for families. 92.5% of the respondents agreed that beekeeping provided a lot of entrepreneurial opportunities. 75.7% of the respondents strongly felt that honey production has increased over the years. The means of the factors describing entrepreneurial growth in beekeeping were 2.02 and below, which is under the theoretical mean of 3.0. Showing in Makueni County, beekeeping can be a lucrative entrepreneurial sector.

#### CONCLUSION

Growth in entrepreneurship in beekeeping is affected by many factors, and a combination of these factors can either lead to success or failure of farmers who practice beekeeping. To understand the sector, we looked at government policy, people's culture, technical support, access to markets, and access to finance and the effect they have on entrepreneurship growth. Entrepreneurship in beekeeping could provide a steady source of income and food for those involved. Beekeeping is one sector that has excellent growth potential.

Entrepreneurship is vital for development. The beekeeping sector can develop significantly and reach full potential if the right policies are in place. Policy provides entrepreneurs with guidance and structure. The process of starting and running an enterprise is made more accessible. Individuals are trained and equipped with the essential tools to run and successfully manage a business. Entrepreneurial people are not limited because they do not have the needed resources. When entrepreneurs are in a specialised field like beekeeping, this requires training so that new technology can be embraced only then can entrepreneurial growth within the sector be achieved.

Culture within a community plays an essential role in entrepreneurship growth. The culture of a community is evident from the activities conducted by the people. The family, the most integral part of a community, can be a significant source of encouragement for entrepreneurs. If the culture is free, then gender is not as issue as seen in Makueni where both men and women practised entrepreneurial beekeeping. It creates a good background for development within the sector. Technical support for entrepreneurs in specialised areas is necessary. Entrepreneurs without support can lead to discouragement. Entrepreneurship in agriculture requires experts who can introduce and train on new technology and new methods of production.

Access to markets was an essential factor for the growth of entrepreneurship. Information about different markets, and how to access them readily instils confidence. Entrepreneurs need to have the assurance that once they have a product, they can make a profit out of it. Hence, they need education on marketing skills. If entrepreneurs have information about trends within the market, they equipped to decide on whether to continue with their ventures.

Finance is another factor that can hinder entrepreneurial growth, bee equipment and inputs are expensive, and therefore, farmers need cash to run an excellent modern enterprise. Entrepreneurship requires capital to start and run a successful business. Access to loans from banks is not easy for many entrepreneurs due to lack of collateral and the high-interest rates. It leads to many depending on family support or personal savings. As a result, many entrepreneurs stagnate others close.

#### **RECOMMENDATIONS**

Skill development is an important area that needs to be addressed seriously by policy. It needs to be specific for beekeeping entrepreneurs. The policy needs to address marketing opportunities, guidelines on safety and production, guidelines on best practice to grow the sector to its full potential. Policy also needs to motivate potential entrepreneurs. Address the financial accessibility to enable more entrepreneurs to access funds. Technical support should be readily available for beekeepers. It can be provided by extension officers who visit and offer help to farmers whenever needed.

Market accessibility is crucial for the growth of entrepreneurship. Information about markets, both local and international, should be readily available for entrepreneurs. The government can help entrepreneurs' access external markets by creating supply chains that link them to consumers. It will increase profits improving the livelihood of the farmers and ensuring the growth of the sector. Financial institutions should embrace flexible regulations to accommodate entrepreneurs who are starting.

#### SUGGESTIONS FOR FURTHER RESEARCH

The study highlighted that many of the respondents would appreciate training in marketing. Research can be conducted on the training offered by the government to entrepreneurs, for example, how do trained entrepreneurs fair in the market. Further research can be to determine the entrepreneurial interest of beekeepers in Makueni and other honeyproducing counties by assessing the number of entrepreneurs willing to adopt new technology, be part of cooperative groups, and explore new markets for their products.

Research can be on other factors affecting entrepreneurship growth to explain the low production of honey in the country. Entrepreneurship in apiculture in other counties can be conducted. Other variables can be considered, for example, managerial capabilities of beekeepers, record keeping skills, and the financial literacy of beekeepers. Further research can be on how the entrepreneurial behaviour of beekeepers can be changed so that the sector can be sustainable.

#### REFERENCES

Aghion, P. and Festré, A. (2017). Schumpeterian growth theory, Schumpeter, & growth policy design. Journal of Evolutionary Economics, 27(1), 25-42. https://doi.org/10.1007/s00191-016-0465-5

Boutillier. S., Levratto. N. & Carre.D. (2016). Entrepreneurial ecosystems. 1st edition. John Wiley & Sons.

Brush, G. C. (2014). Innovative pathways for university entrepreneurship in the 21st century: Exploring the concept of an entrepreneurship education ecosystem. Emerald publishing limited, pp. 25-39.

Bwisa, H. (2011). Entrepreneurship theory and practice. Nairobi: the Jomo Kenyatta Foundation.

Carroll, T. & Kinsella, J. (2013) Livelihood improvement and smallholder beekeeping in Kenya: the unrealised potential. Development in Practice 23, 332-345. doi:10.1080/09614524.2013.781123.

Chemwok, K. (2016). Factors influencing honey production in Marigat, Baringo County- Kenya.

Cohen, B. (2007). Market imperfections, opportunity, and sustainable entrepreneurship. Journal of business venturing. (0883-9026), 22(1), p.29. https://doi.org/10.1016/j.jbusvent.2004.12.001

Cor, M. (2011). Application of information technology and the internet within marketing. Routledge.

Dike, O. & Onwuka, E. (2016). Entrepreneur perception and growth in beekeeping in Abia state, Nigeria.

Ester, P. (2017). Innovation and Startups in Silicon Valley: An Ecosystem Approach. In Accelerators in Silicon Valley (pp. 37-62). Amsterdam: Amsterdam University Press. doi:10.2307/j.ctt1zrvhk7.7

Evans, A. J. (2016). The unintended consequences of easy money: How access to finance impedes entrepreneurship. Review of Austrian Economics, 29(3), 233-252. doi:http://dx.doi.org/10.1007/s11138-015-0322-z

Fernández-Serrano, J. & Liñán, F. (2014). Culture and Entrepreneurship: The Case of Latin America. Innovar: Revista De Ciencias Administrativas Y Sociales, 24, 169-180. Retrieved from www.jstor.org/stable/43786379

Galindo, M. Méndez, M. & Alfaro, J. (2010). Entrepreneurship, income distribution and economic growth. International Entrepreneurship and Management Journal, 6(2), 131-141. doi:http://dx.doi.org/10.1007/s11365-010-0142-3

Geloso, V. (2015). Deirdre Mccloskey, Kirznerian Growth and The Role of Social Networks. Economic Affairs, 35(3), 453-463. https://doi.org/10.1111/ecaf.12138

Government of Kenya. (2008). Ministry of livestock development. Session paper no.2 of 2008 on national livestock policy.

Government of Kenya. (2015) Kenya National Bureau of Statistics. Economic Survey. Kenya National Bureau of

Government of Kenya. (2015). An economic review of agriculture. Ministry of agriculture, livestock, and fisheries.

Government of Kenya. (2018). Makueni County integrated development plan of 2018-2022. Makueni County.



Government of Kenya. (2019). Department of agriculture, irrigation, livestock, and fisheries development. Beekeeping status Makueni.

Government of Kenya. National farmers' information service. Ministry of livestock development government of Kenya. Retrieved from http://www.nafis.go.ke/livestock/beekeeping/.

Hansen, D. Giglierano, J. & Whalen, P. S. (2018). The business model canvas and customer development. Journal of research in marketing and entrepreneurship. Vol 20. No.1. Emerald publishing limited. DOI 10.1108/JRME-07-2018-051

Kathila., G., M (2017). Factors influencing the uptake of beekeeping as an economic activity in Kenya: A case of farmers in Makueni County.

Kirzner, I. (2009). The Alert and Creative Entrepreneur: A Clarification. Small Business Economics, 32(2), 145-152. Retrieved from www.jstor.org/stable/40344540

Kofi. D. (2002). Marketing practices in Africa. Journal of business and industrial marketing. Emerald publishing limited

Kumar, R. (2011). Research methodology a step by step guide for beginners. Third edition. Sage publications, Inc.

Lam, W. & Harker, M. J. (2015). Marketing and entrepreneurship: An integrated view from the entrepreneur's perspective. International Small Business Journal, 33(3), 321–348. https://doi.org/10.1177/0266242613496443

Linan, F., & Fernandez-Serrano, J. (2014). National culture, entrepreneurship, and economic development: different patterns across the European Union. Small business economics. Vol 42. No.4 .pp685-701

Litan, R. (2014). Entrepreneurship and economic growth. Creating an environment for entrepreneurial success. Centre for international private enterprises pp 10-11.

Lundstrom, A. & Stevenson, L. (2001). What is distinctive about growth-oriented entrepreneurship in developing countries? World development, 1-10.

Mbae, R. (2012). Factors influencing implementation of allpro beekeeping project in Kajiado and Mwingi districts.

Mburu. B. & Mbwika, J. (2014). Business case of the viability of honey hub in Makueni County. Report by the Kenya Honey Council/ Christian Aid.

Miguel, G. & Maria, M. (2014). Entrepreneurship, economic growth, and innovation: are feedback effects at work? Journal of business research. Vol 67(5), 825-829. https://doi.org/10.1016/j.jbusres.2013.11.052

Mpinga, I. H. (2016). Beekeeping value chain development in Tanzania. Ministry of natural resources and tourism.

Mugenda, O.M & Mugenda, A.G (2003). Research methods; Nairobi African Centre for Technological Studies Press.

Mugenda, A. G. (2008). Social Science Research theory and principles. Nairobi: Applied research and training services.

Muriuki, J. (2016). Beekeeping technology adoption in arid and semi- arid lands of southern Kenya. Bulletin of animal health and production in Africa pp 217-223.

Musambayi, J. (2015). Entrepreneurship climate and its effects on entrepreneurial development in Kenya. International journal of innovative research & development. 4. 280-284

Ndegwa, A. (2016). Beekeeping microenterprises and unemployment in Nyatike Constituency, Migori County Kenya.

Newman, A., Schwarz, S. & Ahlstrom, D. (2017). Microfinance and entrepreneurship: An introduction. International Small Business Journal, 35(7), 787–792. https://doi.org/10.1177/0266242617719314

Olatomide. W. & Olowa. A. (2015). Factors affecting entrepreneurship development in agribusiness enterprises in Lagos state Nigeria.

Oyoo, O (2016). The impact of capital accessibility on the growth of small scale enterprises in Migori county.

Robb, A., Valerio, A. & Parton, B. (2014). Entrepreneurship education and training: context for entrepreneurship in Ghana, Kenya and Mozambique. World Bank publications.

Sambo, W. (2016). Factors affecting youth entrepreneurship development within Kibera, Kenya: The perspective of entrepreneurship education. Problems and Perspectives Management, 14(2), 331-338. doi:http://dx.doi.org/10.21511/ppm.14(2-2).2016.09

Thorsten, B & Asli, D. (2006). Small and medium-sized enterprises: access to finance as a growth constraint. Elsevier. Journal of banking & finance. http://doi.org/10.1016/j.jbankfin.2006.05.009



Vega-Pascual, M. Pietro, D. Filippo, A. & Rafaela. (2017). Entrepreneurship, finance entrepreneurs and job creation: Evidence from panel data. Working Papers on Operations Management, 8 (2), 44-65. doi: http: //dx.doi.org/10.4995/wpom.v8i2.9011

Wachira, K. (2017). Incubate selection criteria and its role on entrepreneurship growth: a survey of university-based incubators. International journal of academic research in business and social sciences, (2222-6990, 7 (1). doi 10.6007/IJARBSS/v7-i1/2553Wambua, B. (2015). Assessment of performance indices of frame hive beekeeping and the traditional technology in Kenya a case study of Kitui county.

Waruguru, L. (2012). Factors affecting entrepreneurs performance in Kenya: a case of Nairobi women groups in the central business district.

