



Development of Entrepreneurial Skills through Agricultural Education for Sustainable Agricultural Business

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Abstract

Entrepreneurship is the process of discovering new ways of combining resources to maximize its potentials. In an ever changing society like ours, creativity and innovation is an essential prerequisite to keep up with the trends. The development of agricultural entrepreneurial capacity in citizens of any nation will help in the nation economy development as they will develop ideas and ways of solving issues rather than depend on the government for survival. Entrepreneurial skills development in agriculture will boost agricultural production and make the sector vibrant and attractive to the younger population. This paper recommends adequate funding of education to achieve its goals and objectives of developing agricultural entrepreneurial skills and capacity in students.

Keywords: Entrepreneurship, creativity, innovation, entrepreneurial skills, development.

Introduction

Entrepreneurship is defined by Sobel (2008) as the process of discovering new ways of combining resources. It is the conception of new ideas and ways of doing things. Falconer (2000) defined entrepreneurship as the mindset of an individual and the process they go through to create and develop economic activity with a unique mix, creativity and innovation, efficient management and an appetite for risk within a new or existing organization. The importance of entrepreneurship in Agriculture cannot be overemphasized with the rapid rate of population increase, the possession and utilization of entrepreneurial skills by farmers will strengthen the agricultural sector in Nigeria to fall in line with global best practices in agriculture that are more innovative.

According to Dollinger (2003), Farm entrepreneurship equates to all the activities which help farmers to adjust to a free market economy. For Gray (2002) the development of entrepreneurship means also a change of quality of management in the process of farming. The modernization of agriculture has necessitated the need for entrepreneurship in agriculture in Nigeria. The Nigerian agricultural sector consists of the ageing population with very little young population. National Directorate of Employment (2006), noted that there is a poor state of young participation in agriculture due to poor state of agricultural productivity experienced by practicing farmers. According to Dandu, Okwoche and Adegboye (2006) the poor state of agricultural productivity and low esteem of agriculture as manifested in rural urban migration in search of better job opportunities, youths low interest in farming, lack of



industrial firms to process agricultural products and skilled labour among others has led to worsening food situation in Nigeria.

According to Kalu (2013), the reasons for non-participant of rural youth in farming activities are due to the non-attractiveness of the sector and lack of modernization of agriculture in Nigeria. This is because in Nigeria, agricultural production and practices are still being characterized by traditional approach, physical strength (which decline with age), non-youth participation in agriculture, lack of skills and techniques required for management of factors of production, non-availability of improved and hybridized planting materials and reluctance in the adoption of new techniques. All these have resulted in low food productivity and therefore the need for entrepreneurship in agriculture for efficient food production for food security.

The Need for Entrepreneurship in Agriculture

An entrepreneur is an individual who takes responsibility and risk for a business operation with the expectation of making a profit. The entrepreneur decides on the product, acquires capital and production materials. Entrepreneurship is a key factor for the survival of small scale farming in an ever changing and increasingly complex global economy. Entrepreneurship in agriculture will lead to economic development. Entrepreneur farmers see his farm as business. He sees it as a means of earning profit and is willing to take calculated risks to make it profitable and grow. According to Kahan (2012) a farmer entrepreneur produces a clear picture in his mind of what is possible and the future he wants. He knows that what is possible is determined by the market. An entrepreneurial farmer has the initiative, drive, capacity and ability to take advantage of opportunities. Agro business play an important role in the development of any country's economy as a supplier of farming requisites, marketers of agricultural commodities and provision of services in the agricultural sector. This is because of an increasing global competition, a changing social and political environment and complex consumer demand, which require innovativeness and creativity to survive.

Entrepreneurial characteristics

There exist a significant different between farm management and entrepreneurship. Farm management is about better planning, implementation, control and managing risk. Entrepreneurship is about looking forward, identifying opportunities, innovation, creativity, taking risk and creating a vision of how the business will grow. Certain characteristic distinguish an entrepreneur and Kahan (2012) classified such characteristics into six groups namely;

- ❖ Core value which consist of honesty and trustworthiness
- ❖ Problem-solving which consist of creativity, innovativeness, imagination, learning from failure
- ❖ Flexibility which constitute of being flexible, adaptive, tolerative to ambiguity.
- ❖ Drive: this involve being highly motivated, determined and preserving.
- ❖ Competition: This constitute being goal driven competitive and taking initiative.
- ❖ Confidence: This constitutes being a risk taker, being confident, positive and persuasive.



It is these characteristics that enable entrepreneurial farmers to seek-out business opportunities, conceptualize and initiate new business ideas, gather the physical, financial and human resources needed to start the business, set goals and guide the farm and all its resources to accomplish those goals.

According to Kumar (2003), entrepreneurs' need more than just their personal characteristics, competencies, and abilities are needed which can be learned and developed through education, training and experience. Fick (2002) posited that an essentiality of any competency is knowledge. According to Rudman (2003), knowledge allows farmers to make informed choices. It is a key factor in any farm business management as it afford farmers the opportunity and put them in a better position to compare the current practices being used with alternative. Although level of education may influence the development and usage of knowledge, farmers with less formal education can still be effective learners by acquiring and utilizing knowledge through various means. A successful entrepreneurial farmer takes command of his own learning. Information is obtained in various ways; through observation, experience, and from extension agents. According to Rudman (2003) information and its communication is an important aspect of knowledge creation and accumulation. Farmers need knowledge in each of the key areas of farm management. Information about their direct functions such as primary production, harvesting, processing, wholesaling, and retailing and their support functions such as input supply, financial services, packaging promotion and advisory services are necessary and that each farmer handles knowledge in different ways. More traditional farmers tend to cling to the knowledge learnt from their fathers while market oriented entrepreneur farmers actively seek new and reliable information that will help in decision making.

Entrepreneurial Skills Requirement for an Entrepreneurial Farmer

Kahan (2012) posited nine entrepreneurial skills required by an entrepreneurial farmer. These include:

- ❖ **Initiative:** This involves the willingness to work. Leading the way and not waiting for others. It involves knowing what is required and need to be done and taking the right steps toward achieving the stated agricultural production goals.
- ❖ **Ambition:** This is a strong desire and determination to achieve goals. According to Kumar (2003), entrepreneurial farmers should focus on goal achievement, highly motivated and never deterred by setbacks. They should understand challenges and develop strategies to tackle challenges such as disease outbreak, price fluctuations and natural disasters like flooding through agricultural insurance policies.
- ❖ **Focused on Problem-Solving:** Entrepreneurs are focused and conscientious. They are actively looking for solutions. Every opportunity is being well utilized by an entrepreneur. For the entrepreneurial farmer solving the hunger equation and guaranteeing food security becomes the issue.
- ❖ **Taking Risks:** Entrepreneurial farmers are always willing to take calculated risks. They weigh up the potential costs and benefits and are never being afraid of failure as it is regarded as a process of learning. For the entrepreneurial farmer the experience of crop failure and presence of zoonotic diseases should not be deterrents to agricultural production.



- ❖ **Flexibility and Adaptability:** Farming is in a constant state of change because of the changes in environment and societal system. An entrepreneurial farmer therefore must readily adapt to such issues like technological changes and consumption pattern to keep in line. According to Fick (2002), farmers that are entrepreneur should be aware of these changes and quickly develop ways to adapt to the environment.
- ❖ **Creative Thinking:** Entrepreneurial farmers must be able to see the big picture. They must have an understanding of the problems and opportunities that exist and come up with creative ideas and solution. This will enable the farmer invest in the farm enterprise that will bring him more money.
- ❖ **Readiness to Learn:** Entrepreneurial farmers must be ready to learn. They should be actively looking for new knowledge, skills and techniques. They should take command of their learning and keep themselves informed on agricultural innovations through the internet, seminars and workshops.
- ❖ **Networking:** Entrepreneurial farmers should establish effective partnership with other stakeholders. This will enhance effective information acquisition from agricultural research institutions, agricultural development programmes and commodity associations.
- ❖ **Interpersonal Abilities:** Entrepreneurial farmers understand that some business success depend on ideas gained from others, therefore they must be good communicators. They must be honest and trustworthy especially in ensuring good quality of farm products and objective pricing.
- ❖ **Strategic Thinking:** Entrepreneurial farmers should have a vision of their farm business and strategize ways of achieving their goals. Their aim should be that of meeting long-term objectives for sustainable production and not just addressing immediate problems that are not sustainable. Apart from the skills put forward, Kahan (2012) posited that entrepreneurial farmers need to possess technical skills, managerial skills and integrating skills.

Agricultural Education and Entrepreneurial Skills Development

Carter, Alsos, Ijunggren and Walter (2011) identified three main approaches to building entrepreneurial capacity. They include; formal education, formal training programmes and non-formal capacity building programmes.

Formal Education:

According to the social learning theory of Bandura, learning is the result of observation and the reciprocal interaction between people, behavior and one's environment (Bandura, 1977). This theory asserts that humans are products of learning hence they recognize symbols and are influenced by behavior, persons and environments. The interrelations between these factors are dynamic. Agricultural education is used to impart skills to learners through a tripartite teaching platform of classroom/laboratory instruction, supervised agricultural occupational experience programs (SAOEP) and leadership development program (LDP) like the young farmers club (YFC). An agricultural education program that is balanced must have all these components which are meant to develop entrepreneurial skills and competencies in students.

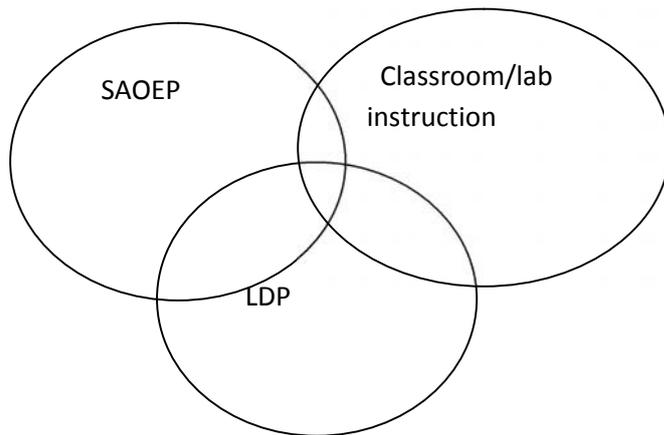


Fig1. Tripartite Model of Agricultural Education

- **Classroom/Laboratory Instruction:** Knowledge and skills relevant for development of entrepreneurial competencies are acquired through classroom and laboratory each based on the curriculum in the technical areas of crops and animal production. The students interest are being stimulated at this stage for skills acquisition to makes them develop an entrepreneurial mindset.
- **Supervised Agricultural Experience:** this involves real-world or concrete vocational experiences in agricultural activities done by students outside of planned classroom and laboratory activities. It is an essential element to develop career skills of students in trade areas of agriculture they are interested. Skills acquired through the supervised agricultural occupational experience programme (SAOEP) impact positively on the students and change their view of agriculture and last a life time. Okiror, matsiko and oonyu (2011) compared the learning achievement of students taught using supervised home gardens and those taught using school gardens. While no statistical different was found between this two groups on knowledge of agriculture , they did discover that home gardening showed benefits such as personal income and purchase of productive assets from proceeds, provision of additional food for the household, and general independent learning. Supervised agricultural occupation experience programme builds students' self-esteem, develop their working ethic, help them in taking of responsibility, acquiring business practice skills and establishing rapport with employers. It creates a pathway from education to career and help students to be aware of updated and relevant information. There four are major types of SAOEP namely:
 - a) **Exploratory SAOEP:** This is designed to allow student experience agricultural areas in anticipation of future agricultural occupations and career planning. Here students are not restricted to areas of interest but are allow to explore various aspects as time permit.
 - b) **Placement:** Here students are assigned to an employer depending on their interest. The focal point is learning of skills and attitudes of the agricultural enterprise and being mentored to acquire necessary business principles. The students get familiar with the work environment and interact with the



employer. Based on Bandura theory of social learning the students get influenced in their behavior and thinking. They get to learn the principles, attitude, the thinking capacity required of people in that vocation and see agriculture as a business enterprise which can serve as a means of livelihood.

- c) **Entrepreneurship:** in this SAOEP students are allowed to establish and run their own agricultural businesses. Here students gain the skills, attitudes, abilities and principles of an agricultural enterprise and get to have a firsthand experience of actually running a business. They are involved in decision making, risk taking having an initiative, flexibility due to constant environmental changes, creative thinking, learning of marketing strategies and ability to work with others to gain knowledge and ideas.
 - d) **Agricultural Science Research:** This is basically science based experience in utilizing laboratory procedures to study an issue related to agriculture and finding a solution to the issue. Here students learn the act of strategic thinking and focus on problem-solving ability.
- Youth leadership program: Youth leadership programs are organized to mentor and equipped youths with skills and competencies necessary for self employment. Programs such as the young farmers club, youths in agriculture and future farmers of Nigeria seeks to help students develop their leadership abilities, enhanced knowledge sharing of innovative and effective practices and also act as a catalyst to inspire the students in creative and innovative ways. Here successful entrepreneurs are invited to talk to the students and excursions to farm enterprise are regularly organized so as to spur up the students to be imaginative, productive and innovative.

Formal Training Programmes

Training courses are useful approach to training and developing entrepreneurial farmers. Such programmes help improve farmers' business and entrepreneurial skills and capacity. The advantage of formal training is the ability to help in practicing particular skills. To attract farmers to attain such training programmes, the objectives of the training must be clearly set while the programme must be offered at convenient times and in convenient locations for the benefits to be evident to potential participants.

Care must be taken not to over simplify the training programme and learning-by-doing must be done in the context of the participants' own experiences and farming system. Learning should be a process of discovery involving discussion, practice and reflection not just knowledge and skills transfer (Fick,2002). Practice is essential if the programme objectives of effective skills and capacity building is to be achieved. Kahan (2012) posited that there are varieties of ways to structure training programmes. They can be comprehensive and extended over longer period or it could be brief and concise workshops. Whichever structure a training programme takes; it should be designed to cover the curriculum so as to build the desire capacity in the participants. Fick (2002) recommended that training programmes should be practical and application oriented, participative and provide opportunities for participants to deal with real areas of their enterprises.

Non-Formal Capacity Building Programmes

This include the following as posited by Kahan (2012),



- ❖ **Awareness-Raising Workshops:** These are avenues used for information dissemination to raise awareness about a particular issue. It could also be an opportunity for participants to share ideas and experiences and learn from each other.
- ❖ **Combining Training and Extension:** This programme consists of short sessions of learning after which participants will apply new techniques and skills learnt to their farming situation under the guidance of the trainer.
- ❖ **Business Clinics:** This involves an arrangement where a group of farmers meet with trainers and extension workers and share experiences on the best way to tackle specific problems. According to Charantimath (2011), it could be a one-off exercise or series of meetings could be involved.
- ❖ **Success Case Replication:** This is a farmer-to-farmer learning that develop innovative entrepreneurial capacity in farmers which will enable them identify new practices. Successful case replication involves getting the original innovator-entrepreneurs to train aspiring entrepreneurial farmers and to share information and experiences with them.

Conclusion

Education is essential for entrepreneurial capacity development. An important part of facilitating the learning of entrepreneurial skills is creating suitable opportunities to learn through seminars, problem-solving techniques and written information are other useful and exciting ways of entrepreneurial capacity development. The development of any nation is a direct proportion of its citizens entrepreneurial skills and capacity development. This is because high skilled, creative, innovative and critical thinkers will devise ideas, ways and methods of solving problems in any country thereby contributing to its growth and development rather than depend on the government to provide everything.

Recommendations

This paper recommends the following:

1. Federal and state government should adequately fund education to the 26% United Nations educational, scientific and cultural organization (UNESCO) benchmark to achieve entrepreneurial skills for sustainable Agricultural business development.
2. Teachers of Agriculture should use hands-on instructional delivery method in agriculture to impart entrepreneurial skills to learners and not just for academic knowledge acquisition.
3. Government through the ministry of agriculture and agricultural development programmes (ADP) should organize seminars and workshops frequently to educate farmers on entrepreneurial skills and techniques of how to operate farming as business.

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