

Assessment of the Entrepreneurial Trends of Agricultural Undergraduates: A study at Faculty of Agriculture, Eastern University, Sri Lanka

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Abstract

Since creation of agricultural enterprises going to reflect the micro and macro level development of Sri Lanka, it is very important to study the entrepreneurial trends of Agricultural Undergraduates. Likert scale scoring method was used to assess the responses of involvement, role model effect, aware of demands, confidence and willingness. 37.8% were strongly agreed to do full time business. The average score for to do agriculture businesses were in between agreeing and strongly agree. The average scores for role model effects were less than agree. Average score for aware of needs of society was less than agree. 75.7% of them were able to identify the demands of the society. The demands identified were human capital, self-sufficient domestic production, safe and nutritional foods. The confidence of having enough skills score was less than agree. 64.1% of them were owned special skills to carry out entrepreneurial activities. Such skills were possession of different human capitals, management skills. The willingness responses scores were more than agree. 61.5% of them were discussed their business plan. Their dream plans were development of new food products, quality planting materials, harmless method of cultivation and floricultural industry. Those should be supported by government policies and other related organizations.

Keywords: Entrepreneurial trends, Agricultural Undergraduates, Sri Lanka

Introduction

Entrepreneurship as seeing and pursuing opportunities by having and running a privately owned company or within a (larger) company, as a result of which value is created for the individual and community. An entrepreneur is someone who owns and runs a business on his own account and risk. The national poverty headcount ratio in the period of 2012 and 2013 was 6.7% (Department of Census and Statistics, 2015). The unemployment rate for the 2013/2014 period was 4.1% (Department of Census and Statistics, 2016). Entrepreneurship also could be a solution for underemployment. Agricultural based graduates are produced from 8 national universities in Sri Lanka. The total number of graduates in the field of Agriculture from University of Peradeniya, Eastern University, University of Jaffna, Wayamba University, Sabaragamuwa University, University of Rajarata, University of Ruhuna and Uva Wellasa University in the period of 2014 was 857 (Sri Lankan University Statistics, 2015).

One of the objective of Sri Lanka's Agricultural policy is to promote agro based industries and increase employment opportunities. While currently agricultural sector contributes 18% of GDP and 30% of employment. The unemployment or under employment of youth in the country can lead to serious social unrest and related problems and interestingly it is noted that the self-employed graduates were very low in number among the Science and technical graduates. However, this number appears to be increased when there is a high unemployment rate and it was also noted that most of these self-employed graduates were involved in private tuition as tutors until they find a suitable employment (Dilrukshi and Wickremasinghe, 2007).

Thailand like countries shows high diversification in food product development, agriculture based industries and enterprises. There are a lot of processed food industries are available (Silva et al, 2009). We are lack in such kind of food processing. Marketing mechanism becomes important one for the success of any business plan. Sri Lanka's resources are more suit to develop new businesses based on Agriculture. Those Agribusinesses could be carried out with skilled graduates with their scientific and e-knowledge capacity. One of the research study in this field examined the factors affecting entrepreneurial intention of undergraduates (Perera et al, 2011) and they found economic factors such that market opportunities, access to market and market stability was the problems faced by new entrants.

Habaragoda B.S (2012) did an entrepreneurship inclination study of management undergraduates who found entrepreneurially inclined group have higher need for achievement, higher risk taking propensity, high tolerance for ambiguity and higher risk taking propensity and innovativeness and also found such inclination is significantly associated with entrepreneurial education. This study assessed the entrepreneurial competencies and capacities of agricultural undergraduates specifically. The research question was what are the entrepreneurial trends of agricultural graduates? What affect them to receive more about this skill or capacity?

Methodology

Likert scale scoring method (4: strongly agree, 3: agree, 2: neither agree or disagree, 1: disagree, 0: strongly disagree) was used to assess the competencies of entrepreneurial trends. The response assessed was involvement, role model effect, aware of demands, confidence and willingness. B.Sc. in Agriculture is a four year taught course with a component of Research. The students in third year second semester and final year first semester were interviewed for this study during early period of 2015. All together 39 respondents were interviewed. Frequency analysis was used to count each response. Amoeba diagram was drawn to show the different component of assessments.

Results and Discussion

Involvement with entrepreneurial activities in time phase and kind of activities

According to the different responses 55.3% of them strongly agreed that they want to be an owner of enterprise. The mean score for want to be an owner of enterprise was 3.55. While 71.1% of responses were strongly agreed to run agriculture relevant enterprises. The mean score for to run agriculture related enterprise was 3.55. All of the respondents were responded for these statements (Table 1). 71.1% of them strongly agreed to run a business related to agriculture (Table 2).

Table 1: Involvement with entrepreneurial activities in time phase

Entrepreneurial ability statements	Mean score	Percent of Responses				
		Strongly agree (4)	Agree -3	Neither agree nor disagree (2)	Disagree (1)	Strongly disagree (0)
I would like to run an enterprise myself/ I want to be an owner of enterprise	3.55	55.3	44.7	-	-	-
I am interested to initiate a business plan as Full time/Primary purpose	3.05	37.8	40.5	13.5	5.4	2.7
I am interested to initiate a business plan as Part time/Secondary purpose	2.38	13.5	43.2	16.2	21.6	5.4
I will run a business plan in my leisure time	2.26	13.2	42.1	10.5	26.3	7.9
I will jointly run a business plan with my relatives or friends	2.03	18.9	27	16.2	13.5	24.3

Table 2: Involvement with kind of entrepreneurial activities

Entrepreneurial ability statements	Mean score	Percent of Responses				
		Strongly agree (4)	Agree (3)	Neither agree nor disagree (2)	Disagree (1)	Strongly disagree (0)
I would like to run a business plan mostly relevant to Agriculture	3.66	71.1	26.3	-	2.6	-
I would like to run a business plan other than Agriculture	1.74	10.5	26.3	15.8	21.1	26.3

Aware of the entrepreneurial activities in the surrounding, role model effect and needs of society

The entrepreneurial statements to check whether the under graduates are aware of the ongoing entrepreneurial activities in the surrounding and role model effect such that whether they know any role model from surrounding to international level also was observed. The mean score for all five statements was less than 3. It means less than the state of agree. They are unaware of the examples for entrepreneurial plans. 18.9% of them strongly agreed that they are aware of the entrepreneurial activity in the surrounding. 16.2% strongly agreed that they have known the ideal personality for their business plan. 10.8% strongly agreed that they have known a known a role model of entrepreneur/business man in their surroundings. Among the respondents 23.7% only mentioned the business of the role model in the surrounding. While 13.5% strongly agreed that they have known a role model of entrepreneur in country/national level. Among the respondents 21.6% mentioned the business of national role model. 7.9% % strongly agreed that they have known a role model of entrepreneur at international level. 16.7% mentioned the business of international role model. As a remedy for this situation role models and their experiences should be shared with undergraduates. 17.9 % of respondents were strongly agreed that they

are aware of the needs or demands in their society (Table 3). 71.8% of respondents mentioned the needs of the society. The different needs identified were categorized as follows:

Quality and efficient production: Cheap agro technology, Compost, Quality and efficient production, production facility, Quality planting products, raw material.

Human capital and employment opportunities: Education, Capital, Infrastructure, Money, Leadership, Human resource, practical knowledge, skilled labour, supervision knowledge, opportunities and employment.

Nutrition and food products: Fresh milk, Food products, Meat, egg, Nutrition, Organic foods, safe and nutritional foods, Good drinking water, Preserved foods, milk processing factory, milk products, Production and consumption of green leaves, Self-sufficient in domestic production

Welfare and human ethics: Income, living standard, helping mind, equalit .

Table 3: Aware of the entrepreneurial activities in the surrounding and role model effect

Entrepreneurial ability statements of awareness	Mean score	Percent of Responses				
		Strongly agree (4)	Agree (3)	Neither agree nor disagree (2)	Disagree (1)	Strongly disagree (0)
I am aware of the entrepreneurial activities (businesses/self-owned enterprises) in my surrounding	2.62	18.9	45.9	21.6	5.4	8.1
I have known the ideal personality for my business plan	2.62	16.2	56.8	8.1	10.8	8.1
I have known a role model of entrepreneur/business man in my surrounding (23.7)*	2.43	10.8	45.9	21.6	18.9	2.7
I have known a role model of entrepreneur in my country/national level (21.6)*	2.68	13.5	62.2	5.4	16.2	2.7
I have known a role model of entrepreneur at international level (16.7)*	2.11	7.9	42.1	15.8	21.1	13.2
I am aware of the needs or demands of my society (71.8)*	2.78	17.9	61.5	5.1	5.1	7.7

Note: *Percent of respondents mentioned the examples are shown in parenthesis

Entrepreneurial ability of skills and e-resource use and special skills possessed by undergraduates

10.3% strongly agreed that they owned enough skills to carry out the entrepreneurial activities. 56.4% of graduates agreed of this statement. Among them 64.1% of them mentioned their special skills to run an entrepreneurial activity. Those skills mentioned are categorized under managerial ability, knowledge and skills, personality and risk, uncertainties and problem solving. Management skills: Business and human resource management, Communication and management. Knowledge and skills: Knowledge and skill about organic farming, experience, technical and practical knowledge, Computer application, Analytical skills. Personality: Attractive, self-confident, motivation, Creative, positive thinking, prediction,

persuade, Leadership. Risk, uncertainties and problem solving: Facing challenges and overcome problems

The mean score for make use the e-resources to create a suitable business plan was 3.18 and 35.9 percent strongly agreed to make use the e-resources to create a suitable business plan. Therefore, e-resource was found to be an effective source to initiate a business plan from the people with entrepreneurial characteristics. Therefore, best or established entrepreneurs could share their background and their path to business in e-forms for utilization (Table 4).

Table 4: Entrepreneurial ability of skills and e-resource use

Entrepreneurial ability statements of skills and e-resource use	Mean score	Percent of Responses				
		Strongly agree (4)	Agree (3)	Neither agree nor disagree (2)	Disagree (1)	Strongly disagree (0)
I am confident in that I have enough skills to carry out an entrepreneurial activity	2.57	10.3	56.4	17.9	5.1	7.7
I will make use the e-resources to create a suitable business plan for me	3.18	35.9	48.7	10.3	0	2.6

Consideration of risk management and ethics in entrepreneurial activities

15% strongly agreed that they will consider risk and uncertainties during business plan. 41% strongly agreed that they will use the strategies to overcome the loss in the business plan. 71.8% strongly agreed that they will consider the environmental sustainability in their business plan. 53.8% strongly agreed that they will consider the ethics during their business activities (Table 5). There was an advantage by agricultural graduates that they mostly agreed to consider environmental sustainability.

Table 5: Consideration of risk management and ethics in entrepreneurial activities

Entrepreneurial ability statements	Mean score	Percent of Responses				
		Strongly agree (4)	Agree (3)	Neither agree or disagree (2)	Disagree (1)	Strongly disagree (0)
I will consider the risk and uncertainties during planning a business plan	3.21	15	20	0	5.1	2.6
I will use the strategies to overcome the loss in my business plan	3.28	41	48.7	5.1	0	2.6
I will consider the environmental sustainability in my investment plan	3.63	71.8	20.5	2.6	0	2.6
I will consider the ethics during my business activities	3.05	53.8	23.1	2.6	7.7	10.3

Amoeba diagram of mean score for different components of entrepreneurial ability statements:

The following diagram shows the mean score for different components of entrepreneurial ability statements. The highest overall score was found to be “consideration of risk management and ethics” the decision was in between agreeing and strongly agree. The lowest overall score was found to be “aware of the entrepreneurial activities in the surrounding and role model effect”.

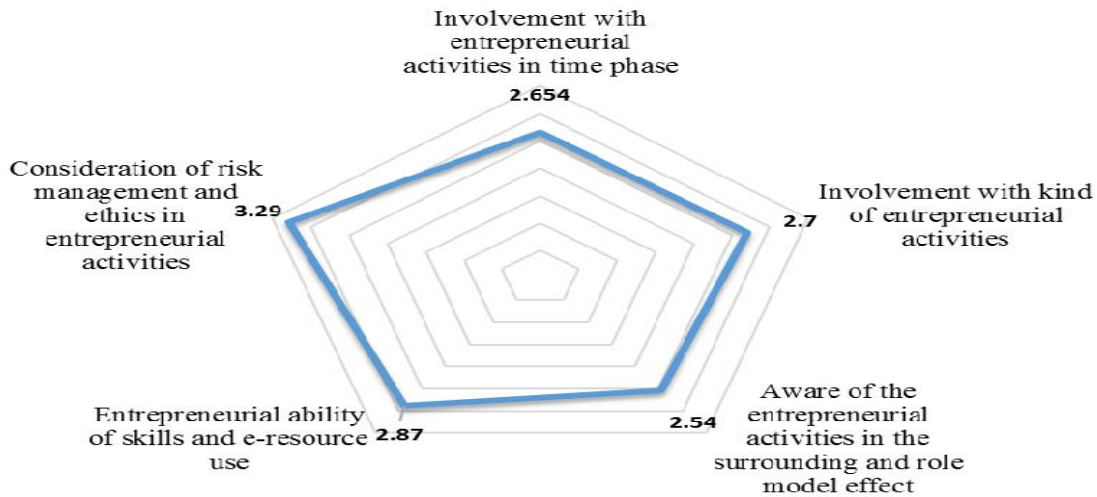


Figure 1: Amoeba diagram of mean score for different components of entrepreneurial ability statements

Sense of needs of Agricultural graduates to run a business plan:

Undergraduates identified knowledge as the most important need of any business creation. Money was identified as the second most important need. Advice and labours were found to be the least important one (Table 6). While some of respondents identified business partnerships, connection with other farmer, infrastructure, marketing facility, materials/inputs, persuasion, technology and technical instruments as specific resources needed. They identified the following sources to obtain the resources needed to run a business plan:

- Money: bank, organizations, by employment
- Advice: experienced business man, subject specialist
- Knowledge: books, internet, programmes in schools and universities, experienced person
- Laborers: relatives, neighbor, surrounding area
- Piece of land: surrounding area, near to city, home garden
- Initiatives about the plan: business man or experienced people, feasible plans

Table 6: Sense of needs of agricultural graduates to run a business plan

Resources required	Order of the needs from 1 to 6						% mentioned sources
	1 (most important)	2	3	4	5	6 (least important)	
Money	38.5	33.3	12.8	10.3	-	-	36%
Advice	5.1	10.3	15.4	10.3	17.9	35.9	28.2%
Knowledge	51.3	15.4	7.7	2.6	12.8	5.1	30.8%
Laborers	5.1	7.7	12.8	28.2	20.5	20.5	28.2%
Piece of land	10.3	12.8	17.9	25.6	28.2	-	20.5%
Initiatives about the plan	17.9	20.5	20.5	15.4	5.1	12.8	12.8%

Dream business plan:

61.5% of undergraduates discussed their dream business plan. The plans were as agricultural enterprises (animal, crop business, best planting, floricultural and landscaping material, broiler farm, coconut selling Centre, dairy product company, exotic flower business, mushroom production, milk products, horticultural, livestock farm, ice cream factory, integrated farming, new foods by research, value added agricultural products with local resources, chemical free green leaves, zero harmless method of pest control and implement that method all over the world).

Conclusion

The studied sample was lack in “aware of the entrepreneurial activities in the surrounding and role model effect”. Therefore, undergraduates should be exposed to internationally and nationally successful and sustainable businesses. They owned risk management capacity and able to obey the ethics of entrepreneurial activities which were also essential to have a sustainable plan. The agricultural undergraduates should strengthen with skills, e-resource use, awareness of surrounding, role model effect to motivate them to carry out entrepreneurial activities of agricultural sector. This is possible through entrepreneurial education. Since they have effective dream plan for a self-sufficient and healthy society, their business should be supported by national scheme and supporting agencies.

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