

A study on agricultural and business students' skills and their know-how to become entrepreneurial exporters in Coimbatore City

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Abstract

This paper is finding the entrepreneurial characters of agro and business students in Coimbatore city, Tamil Nadu, India. The main objective of the paper is to find the Agricultural and Business students' skills and their know-how to become agripreneurial exporters. A questionnaire was distributed among 85 agriculture and business students and analysis were made from the answers given by those students. And to know their interest in becoming agripreneurs. The inferential statics included Chi-square analysis, Co-relation analysis, ANOVA analysis while the descriptive statics includes simple percentage analysis. The scope of agro business is very wide. Most of the students are not willing to take the available opportunities in the agripreneurial sector. This project analyzed the students' interest and their know-how in agripreneurial export. The study found that if necessary training were given students' will definitely try to become agripreneurial exporter.

Keywords: agripreneurs, exporters, AEZ zones, agro-business, export procedure, entrepreneurial skills

1. Introduction

Agripreneurs are a new breed of entrepreneurs combining their love of farming and agriculture with business. Agripreneurs can range from any age group; however most are younger people getting back into the food business to bring healthy better choices to the consumer. Not all agripreneurs are farmers; some have taken the path of adding value through processing or new packaging for the food that farmers have grown.

Someone who is a successful agripreneur is often one who has an outside the box idea and is spotting opportunities where others see none. It is worth remembering that agripreneurs do not have to do it all alone, they can join with others to create a successful value chain while still bringing change.

Despite huge focus on industrialization, over 70 percent of the rural households depend on agriculture as their principal means of livelihood. Nearly 51% of country's workforce still lies in agriculture and related sector, which contributes to 13.9% of the country's GDP compared to 30% in 1990-91. However, there seems to be no light at the end of the tunnel for the already ailing sector as country doesn't have enough skilled professionals who can innovate and revive the sector and take it forward. Further, less than one percent of the agricultural graduates take up PG course and only 4.6% of them pursue PhD, which is again the smallest fraction among all PhDs in India. The figure is appalling considering the mammoth problems which Indian agriculture sector faces, including rise in farmers' suicides, overwhelming dependence of agriculture on monsoons and inhibition to technology adoption.

Flawed government policies, lack of general awareness, skewed job opportunities, IT boom, too much focus on engineering courses and decreasing attraction for

agriculture among younger generation of farmers are said to be major reason behind dismal attraction for agriculture and related courses. Of 722 universities in India, only 62 are Agriculture varsities; the latter have less number of affiliated colleges and intake capacity compared to the general varsities with 100-800 affiliated institutes.

Most students who take up agri-related courses belong to farmer families. "However, off late, enrolment has declined as even farmers' kids want to take up white collar jobs and are opting for engineering and commerce stream instead of innovating in farms, doing research, developing new technologies or setting a start-up due misplaced government policies," said a top official from Konkan Krishi Vidyapeeth, Dapoli.

While an official associated with the Ministry of Agriculture said, "To promote agriculture and horticulture universities in Tamil Nadu, Haryana, Andhra Pradesh, the government has proposed to allocate Rs 200 crore in the 2015-16 budget. Another Rs 100 crore was proposed to set up agro technology institute in Assam and Jharkhand." The experts say these measures are too little and too late.

2. Objectives of the study

Primary Objective

To study the Agricultural and Business students' skills and their know-how to become agripreneurial exporters.

Secondary Objectives

- 1) To analyze their interest in becoming agripreneur.
- 2) To study their assumptions about the cost and benefits in agriculture.
- 3) To know the basic entrepreneurial characteristics and qualities to become an agripreneur.

4) To study about the students’ knowledge about basic export procedures whether they know it or needed training and also to know their preference to take training.

3. Research Methodology

The type of research used in the study is descriptive and includes surveys and facts, findings and enquiries of different kinds. The major purpose of the descriptive research is about giving details of the current state of affairs.

In order to know the skills of students and their know-how to become agripreneur and agro exporter in Coimbatore district 85 agro and business students were selected within Coimbatore city on a strategic random sampling basis.

In order to collect the relevant data from the students a questionnaire consisting 25 questions was constructed. The supporting data have been derived from various sources such as Journal, Websites, Old researches.

The sample size is 85 for this study. Sampling technique for 85 respondents was done using strategic random sampling method.

The tools used for the analysis of the data are Percentage analysis, Chi-Square test, Correlation, ANOVA.

4. Analysis and Interpretation

4.1 Chi-Square Test

- **Aim:** To find the relationship between course they study and students’ choice of career.
- **Null Hypothesis (Ho):** There is no significant relationship between course they study and students’ choice of career.
- **Alternate Hypothesis (Ha):** There is significant relationship between course they study and students’ choice of career.

Formula: Chi-square = $(O_{ij}-E_{ij})/E_{ij}$

Where: O- Observed Frequency
E- Expected Frequency

- **Expected Frequency** = (Row total*column total)/ Whole total
- **Level of Significance:** For all chi-square test, the table value has taken at 5% level of significance (0.05).
- **Degree of Freedom:** = (R-1) (C-1) = (3-1) (4-1) = 6

Table 1: Course Studying vs. Choice of Career

O	E	O-E	(O-E) ²	(O-E) ² /E
2	7.82	-5.82	33.88	4.33
3	1.56	1.44	2.07	1.33
10	7.6	2.4	5.76	0.76
4	3.28	0.72	0.52	0.16
7	12.76	-5.76	33.18	2.60
1	2.55	-1.55	2.40	0.94
18	13.6	4.4	19.36	1.42
5	3.28	1.72	2.96	0.90
26	14.41	11.59	134.33	9.32
3	2.88	0.12	0.0144	0.005
6	14	-8	64	4.57
0	3.70	-3.7	13.69	3.7
Total				30.035

Table 2

Level of Significance	Degree of Freedom	Calculated Value	Table value	Result
5%	6	30.035	12.592	Significant

Calculated value (30.035) > Table value (12.592)

Interpretation

The above table represents the Chi-Square analysis for the course of study and the choice of career of the students. Here the calculated value (30.035) is greater than the table value (12.592). Hence we accept Alternate Hypothesis (Ha).

Therefore it is concluded that there is significant relationship between course they study and students’ choice of career.

5.2 Correlation

- **Aim:** To find out the relationship between the cost and benefits in agro business.
- **Null hypothesis (Ho):** There is no significant relationship between the cost and benefits in agro business.
- **Alternate hypothesis (Ha):** There is significant relationship between the cost and benefits in agro business.

Formula: Correlation = $\frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}}$

x = X-X1, y = Y-Y1
 X = Students’ assumption about the expenses in the agriculture.
 Y = Students’ assumption about the benefits from the agriculture.
 X1 = Sample size / No of options = 85/3 = 28.33333333
 Y1 = Sample size / No of options = 85/3 = 28.33333333

Table 3: Cost Vs Benefits

X	Y	x=X-X1	y=Y-Y1	xy	x ²	y ²
12	39	-16.33333333	10.66666667	-174.2222222	266.7777778	113.7777778
46	40	17.66666667	11.66666667	206.1111111	312.1111111	136.1111111
27	6	-1.333333333	-22.33333333	29.77777778	1.777777778	498.7777778
Total				61.66666667	580.6666667	748.6666667

= 61.66666667/ $\sqrt{580.6666667*748.6666667}$
 = 61.66666667/659.3373778
 Calculated value = 0.093528

Interpretation

The above table represents the Correlation analysis for the cost and benefits in the agriculture. Here the calculated value 0.093528 comes in between - 1 and 1.

Hence we accept Alternate Hypothesis (Ha). Therefore it is concluded that there is significant relationship between there is significant relationship between the cost and benefits in agro business.

5.3 Anova Analysis

- **Aim:** To know the basic entrepreneurial skills among the students.
- **Null Hypothesis (Ho):** The students have entrepreneurial characteristics with equal mean.
- **Alternate Hypothesis (Ha):** The students have entrepreneurial characteristics with at least one mean is different.

Formula: $F = MST/MSE$

F = ANOVAs coefficient.
 MST = Mean sum of squares due to treatment.
 MSE = Mean sum of squares due to error.
 $MST = SST/p-1$
 $SST = \sum n(x - \bar{x})^2$
 SST = Sum of squares due to treatment.
 P = Total no of populations.
 N = Total no of samples in populations.
 $MSE = SSE/N-p$
 $SSE = \sum (n - 1)S^2$
 SSE = Sum of squares due to error.
 S = Standard deviation of samples.
 N = Total no of observations.

Table 4: Entrepneurial characteristics of students

Determinants	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total
Planning orientation	19	48	15	3	0	85
Working orientation	28	42	13	1	1	85
Personal efficacy	23	43	14	3	2	85
Market preparedness	27	43	11	3	1	85
Business acumen	27	40	15	2	1	85
Service orientation	23	33	21	8	2	87
In depth knowledge	23	43	16	3	2	87
Achievement motivation	34	36	13	1	1	85
Social networks	23	46	13	2	1	85
Interest	29	36	13	4	3	85
Total	256	410	144	30	14	854

Table 5: Summary of data

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total
N	10	10	10	10	10	50
$\sum X$	256	410	144	30	14	854
Mean	25.6	41	14.4	3	1.4	17.08
$\sum X^2$	6716	17012	2140	126	26	26020
Std.Dev.	4.2479	4.7376	2.7162	2	0.8433	15.2755

Result

Table 6

Source	SS	df	MS	$F = 260.57777$
Between-treatments	10960.5	4	2740.12	
Within-treatments	473.2	45	10.5156	
Total	11433.7	49		

Interpretation

$F = 260.57777$
 $P < 0.00001$
 $P < 0.5$

P value is less than 0.5. So we accept null hypothesis. The students have entrepreneurial characteristics with equal mean.

6. Tables and Charts

Table 7: Table showing the assumptions of respondents about the expenses in the organic agriculture.

S. No	Expenses	No of respondents	Percent
1	Very low	14	16.5
2	Moderate	56	65.9
3	High	15	17.6
	Total	85	100

Table 8: Table showing the assumptions of respondents about the expenses in the inorganic agriculture.

S. No	Expenses	No of respondents	Percent
1	Very low	10	11.8
2	Moderate	36	42.4
3	High	39	45.9
	Total	85	100

Table 9: Table showing the assumptions of respondents about the benefits in the agro business.

S. no	Benefits	No of respondents	Percent
1	Sufficient	45	52.9
2	Not sufficient	32	37.6
3	Surplus	8	9.4
	Total	85	100

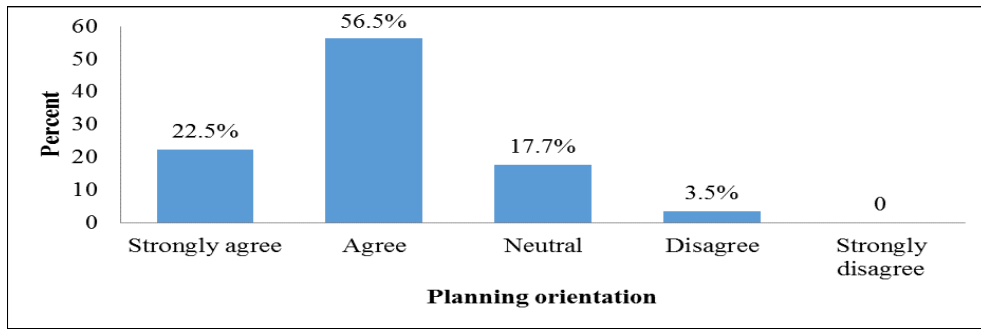


Fig 1: Chart showing the planning orientation capabilities of students to become an agripreneur.

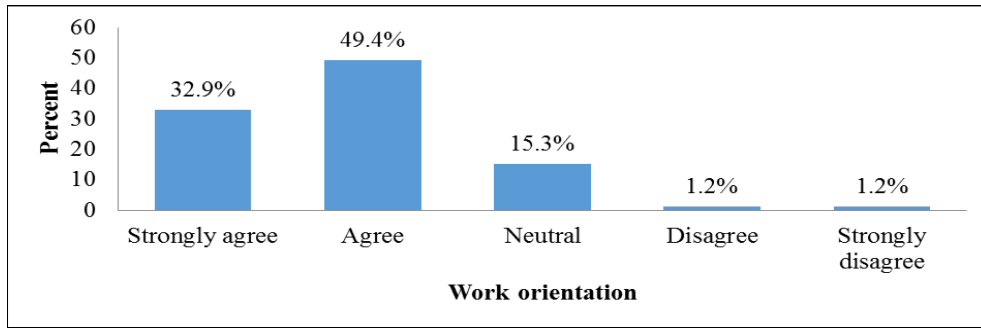


Fig 2: Chart showing the work orientation capabilities of students to become an agripreneur.

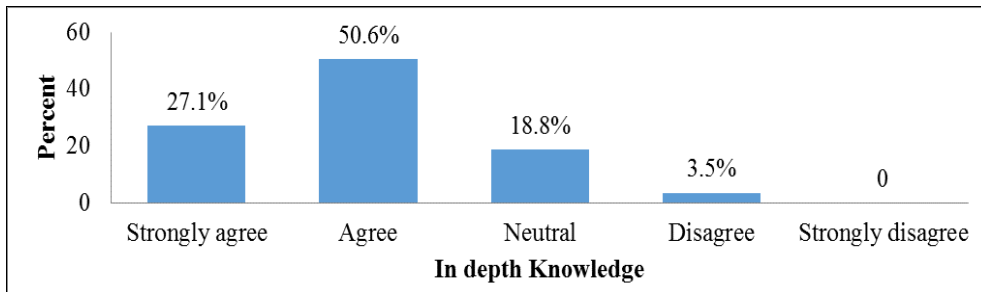


Fig 3: Chart showing the depth of knowledge possessed by students to become an agripreneur.

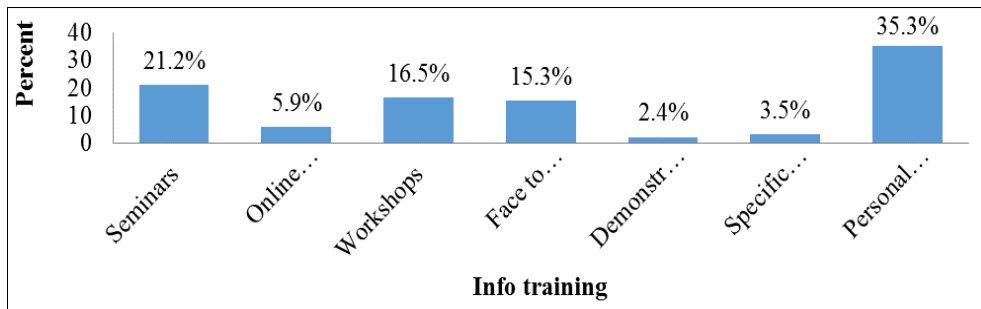
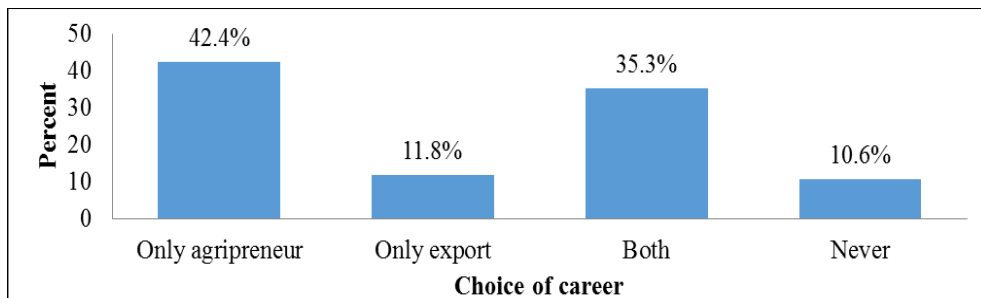


Fig 4: Chart showing the preference of students in learning the information or getting training about agro exports.



Source: Primary Data

Fig 5: Chart showing the choice of career of students.

7. Findings

1. There is significant relationship between course they study and students' choice of career.
2. There is significant relationship between there is significant relationship between the cost and benefits in agro business.
3. The students have entrepreneurial characteristics with equal mean.
4. Majority of respondents 65.9% believe that the expenses in organic agriculture are moderate.
5. Majority of respondents 45.9% believe that the expenses in inorganic agriculture are high.
6. Majority of respondents 52.9% believe that the benefits from agriculture are sufficient.
7. Majority of respondents 55.3% believe that the profits from agriculture are not sufficient.
8. Majority of the respondents 56.5% agreed that they have planning orientation capabilities to become an agripreneur.
9. Majority of the respondents 49.4% agreed that they have work orientation capabilities to become an agripreneur.
10. Majority of the respondents 50.6% agreed that they have deep knowledge in technology, business and management to become an agripreneur to become an agripreneur.
11. Majority 35.3% of respondents said that they prefer to learn information and get training about agro exports through personal consultant with the help of farmers.
12. Majority 49.4% of respondents agreed that they are willing to take up the opportunity in the agro export sector.

8. Suggestions

- Most of the students wanted to become an agripreneur the educational institutions should try to provide additional entrepreneurial related courses along with the main course and the students should also try to utilize the opportunity in order to become a successful agripreneur.
- About 50% of the students know the opportunities available in the agro business students and education institutions should try to create awareness among the students about the opportunities available in the agro business.
- Students after completing their studies should try to get in to the agro business in order to make Indian economy to reach its peak.
- Students also try to increase the output from the agro business by reducing the expenses and increase the profit and benefits from agro business.
- Most of the students with good entrepreneurial characteristics should try to make the agro sector to flourish.
- Government and education institutions should give the necessary training to the about agro exports. Most of the students feel that they need training to became a successful agro exporter. Students should get their essential training through their preferred means.
- Students should try to join hand with the farmers and help them with the modern techniques in order increase the agro business and agro exports.

9. Conclusion

Agriculture matters to the future of development in India. Agriculture is up to four times more effective than other sectors in reducing poverty. Agriculture can be a gold mine for young entrepreneurs. Agricultural research needs young brainpower. The trend of youth choosing agro-business is growing. Attitudes toward agriculture are already changing. Support for the agriculture sector is increasing.

Entrepreneurs who can transform the face of the rural economy have failed to emerge in rural India. The sectors that can benefit hugely from entrepreneurial intervention are food processing and packaging, preservation of seasonal fruits and vegetables, seed processing, flower farming in addition to crop farming etc.

Agro based industries can flourish in rural sectors where labor is abundant and labor cost is low. Small and medium enterprises set up at rural level to supplement traditional farm income in a big way and create alternative sources of income. The government has already initiated to offer attractive incentives including easy loans, insurance schemes and tax benefits to farmers-cum-entrepreneurs.

Likewise, AEZ also arose in order to provide good opportunity for agro exports. Sporadic efforts have been made in the past for promoting export of agricultural produce/products from the country. Thus, on the one hand Research and Development has taken place with little bearing on the development of a particular agricultural produce for the purpose of export, on the other hand financial and fiscal incentives are being provided for exporting a particular produce without actually addressing pre-harvesting and post-harvesting practices. The concept of agri export zone thus attempts to take a comprehensive look at a particular produce/product located in a contiguous area for the purpose of developing and sourcing the raw materials, their processing/packaging, leading to final exports.

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