

# Managerial Efficiency of Vocational Higher Secondary Education (VHSE) Certificate Holders in Agriculture - A post-Finishing School (FS) Evaluation

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## ABSTRACT

The purpose of this study is to identify the impact of finishing school(FS) programs on the managerial efficiency of vocational higher secondary education (VHSE) certificate holders. FS are informal educational programs meant only to fine-tune the already acquired skills, and it is not a substitution for any degree or diploma. The design of the study was ex post facto design. Ninety vocational higher secondary education certificate holders who were exposed to FS of Kerala Agricultural University (KAU) were selected through purposive and proportionate random sampling. Similarly, 40 respondents who were not exposed to the FS were also selected. The data was collected through a structured and pretested interview schedule. Correlation analysis, student t-test, principal component analysis, frequency, and percentage were the statistical tools used. The study result highlighted that the majority of the respondents who were exposed to FS were having medium managerial efficiency. In contrast, the majority of respondents who were not exposed to FS had low managerial efficiency.

## HIGHLIGHTS

- ⦿ Enhanced managerial efficiency of agricultural diploma holders.
- ⦿ Better employment opportunity through Skill development.
- ⦿ Standard curriculum for finishing school programmes.
- ⦿ Scalability.

**Keywords:** Managerial efficiency, vocational higher secondary education certificate holders, Finishing school

The unemployment problem is one of the biggest menaces faced by Kerala, which is far ahead in all developmental indexes and literacy. This is primarily due to the lack of skill development in the educational system of the State. To solve this, Government of Kerala introduced two-year vocational education at the higher secondary level in various streams, including agriculture, with a view to enhance the skills of the students and to equip them to take up various agricultural enterprises.

Finishing schools are non-formal educational institutions designed for short-term training and implemented by institutional academia and public and private sector partnerships. It may be an excellent short and mid-term alternative to bridge the gap between

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the supply of fresh graduates' skills and the demands of the labor market, thus benefiting both sides of the chain, complementing formal education with a more demand-driven methodology (Sreedaya *et al.* 2019). They are informal educational program meant only to fine-tune the already acquired skills, and it is not a substitution for any degree or diploma. The concept of "finishing" implies the existence of a necessary previous step involving formal education. Kerala Agricultural University has introduced the finishing school (FS) methodology to sharpen the skills of the VHSE(Agriculture) certificate holders by enhancing their managerial efficiency. So far, 328 certificate holders have completed this program from three main centers of KAU, namely, the College of Agriculture, Vellayani, College of Agriculture, Padannakad, and Centre for e-learning, Vellanikkara (Sreedaya and Anil Kumar 2014).

The curriculum of the FS program was prepared after a series of brainstorming discussions with stakeholders, and it includes two phases. The first phase of sixty days of training on various aspects of agriculture and allied aspects and the second phase of six months of apprenticeship training at various centers of KAU and the Department of Agriculture, which lasted for six months, during which a stipend of ₹ 6000/ (six thousand only) per month was paid a stipend to each of the trainees.

The present study is carried out with the general objective of estimating the impact of KAU's finishing School Programmes on VHSE (Agri.) certificate holders in terms of their managerial efficiency

## MATERIALS AND METHODS

The study was conducted with Ex-post facto design. A questionnaire was sent to the vocational higher secondary education certificate holders for response who had successfully completed the finishing school program of KAU. Two hundred and twenty-eight, out of the 353 candidates responded through the post and email and finally, 90 were selected through purposive and proportionate sampling with more weightage to the 'self-employed category. Forty vocational higher secondary education certificate holders who were

not exposed to Finishing school were also selected randomly. Managerial efficiency was the dependent variable and 15 independent variables were selected after judges rating and relevancy scoring from a list of fifty personal socio-psychological characteristics. Data was collected through a structured interview schedule, observations, and focus group discussions. Managerial efficiency was measured by a scale developed by Shilpa (2001) followed by Rani (2014) which consisted of 28 statements in six dimensions. The statistical tools used were frequency, percentage, quartile deviation, principal component analysis, Pearson product moment correlation, student t-test.

## RESULTS AND DISCUSSION

### Managerial efficiency of the respondents

Planning, organizing, supervising, communicating, coordinating, and controlling abilities of respondents were measured, and the overall scores were utilized to arrive at the managerial efficiency scores of respondents.

### Planning ability

From Table 1, it is evident that the planning ability of the majority (64.44 %) of the respondents who were exposed to FS was medium, followed by 22.22 percent of respondents with high and 13.33 percent of respondents with low levels of planning ability. Interestingly, half (50.00 %) of the unexposed respondents to FS were with low planning ability.

**Table 1:** Distribution of respondents based on planning ability

Sl. No.	Category	Score range	Unexposed to FS (n=40)		Exposed to FS (n=90)	
			F	%	F	%
1	Low	<8	20	50	12	13.33
2	Medium	8-17	19	47.5	58	64.44
3	High	>17	01	2.5	20	22.22

Q1=8, Q3=17, Expected score range = 5-25, Data score range = 8-22

F- Frequency, %- Percentage, FS- Finishing school.

This might be because of the fifteen days long training given in project planning and report formulation to

the respondents during finishing school training from which they had attained their ability to plan efficiently for success in a venture. Similar findings were recorded by Bhagyalakshmi (2002) and Kishorebabu (2004).

### Organizing ability

From Table 2, it is evident that 46.67 percent of respondents exposed to FS had higher organizing ability, followed by 40 percent of respondents with medium and 13.33 percent with a low level of organizing ability. It was clear that nearly half (47.5 %) of respondents who were unexposed to finishing school had low organizing ability. It might be because of the modular coaching in soft skills and managing skills, which included various aspects of organizing and managing agri-business ventures in the FS curriculum.

**Table 2:** Distribution of respondents based on organizing ability

Sl. No.	Category	Score range	Unexposed to FS (n=40)		Exposed to FS (n=90)	
			F	%	F	%
1	Low	<7	19	47.5	12	13.33
2	Medium	7-11	13	32.5	36	40
3	High	>11	08	20	42	46.67

Q1=7, Q3=11, Expected score range = 3-15, Data score range = 3-13

F- Frequency, %- Percentage, FS- Finishing school.

### Supervising ability

**Table 3:** Distribution of respondents based on supervising ability

Sl. No.	Category	Score range	Unexposed to FS (n=40)		Exposed to FS (n=90)	
			F	%	F	%
1	Low	Low <16	18	45	12	13.33
2	Medium	Medium 16-26	14	35	60	66.67
3	High	High >26	08	20	18	20

Q1=16, Q3=26, Expected score range = 7-35, Data score range = 8-32

F- Frequency, %- Percentage, FS- Finishing school.

From Table 3, it is clear that the supervising ability of the

majority (66.67 %) of respondents who were exposed to FS was medium, followed by 20 percent of respondents with high and 13.33 percent of respondents were a low level of supervising ability. It was found that the majority (45.00%) of the respondents who were unexposed to FS were with low supervising ability.

It might be because of the self-confidence built by them through various exposure to managing and planning skills training. The finding was in line with Atsan's (2006).

### Communication ability

From Table 4, it can be found that the communication ability of 56.67 percent of respondents who were exposed to FS was in a medium level, and 47.5 percent of respondents who were unexposed to FS had low communication ability.

**Table 4:** Distribution of respondents based on communication ability

Sl. No.	Category	Score range	Unexposed to FS (n=40)		Exposed to FS (n=90)	
			F	%	F	%
1	Low	Low <10	19	47.5	07	7.7
2	Medium	Medium 10-21	15	37.5	51	56.67
3	High	High >21	06	16	32	35.56

Q1=10, Q3=21, Expected score range = 5-25, Data score range = 7-23

F- Frequency, %- Percentage, FS- Finishing school.

It might be because of the training given to them in communication. The modules in the skill training phase mainly focus on enhancing the communication and presentation abilities of trainees. Preparation of project report and its powerpoint presentation before the entire team of scientists and peer group might have given the certificate holders great confidence for communicating efficiently. This finding was in line with Deshmukh and Chole (2012).

### Coordination ability

From the Table 5, it is evident that the majority (75.00%) of respondents who were unexposed to FS had low

coordination ability. It was interesting to note that 52.22 percent of the respondents who were exposed to FS were having medium coordination ability, followed by 28.89 percent of respondents having high, and 18.89 percent of respondents had low coordination ability.

**Table 5:** Distribution of respondents based on coordination ability

Sl. No.	Category	Score range	Unexposed to FS (n=40)		Exposed to FS (n=90)	
			F	%	F	%
1	Low	Low <9	30	75	17	18.89
2	Medium	Medium 9-17	06	15	47	52.22
3	High	High >17	04	10	26	28.89

Q1=9, Q3=17, Expected score range = 4-20, Data score range = 8-18

F- Frequency, %- Percentage, FS- Finishing school

It might be because of the several exposures received by the respondents in team building and stress management through various presentation workshops included in the FS curriculum. The finding was in line with Paul (1998).

### Controlling ability

From Table 6, it is evident that the controlling ability of the majority (80.00%) of the respondents who were unexposed to FS was low. It was found that the controlling ability of 51.11 percent of respondents who were exposed to FS was medium, followed by 42.22 percent of respondents with high and 15 percent of respondents with low controlling ability.

**Table 6:** Distribution of respondents based on controlling ability

Sl. No.	Category	Score range	Unexposed to FS (n=40)		Exposed to FS (n=90)	
			F	%	F	%
1	Low	Low <9	32	80	06	15
2	Medium	Medium 9-17	06	15	46	51.11
3	High	High >17	02	05	38	42.22

Q1=9, Q3=17, Expected score range = 4-20, Data score range = 7-18

F- Frequency, %- Percentage, FS- Finishing school.

It might be because the persuasive and leadership qualities of respondents were reinforced through skill training and practical sessions of FS. The finding was in line with Rani (2014).

### Distribution of respondents based on Managerial efficiency

It is clear from Table 7, that 55.55 percent of the respondents who were exposed to FS exhibited a medium level of managerial efficiency, followed by 33.33 percent of respondents with high and 11.11 percent of respondents with low managerial efficiency. It was found that half (50.00 %) of respondents who were unexposed to FS showed a low level of managerial efficiency.

**Table 7:** Distribution of respondents based on Managerial efficiency

Sl. No.	Category	Score range	Unexposed to FS (n=40)		Exposed to FS (n=90)	
			F	%	F	%
1	Low	Low <89	20	50.00	10	11.11
2	Medium	Medium 89-110	16	40.00	50	55.55
3	High	High >110	04	10.00	30	33.33

Q1= 89, Q3=110, Expected score range =28-140, Data score range = 76-126

F- Frequency, %- Percentage, FS- Finishing school.

The study result highlighted that the majority of the respondents who were exposed to FS were having medium managerial efficiency while the majority of respondents who were not exposed to FS had low managerial efficiency. In fact, the training session dealt with time management, stress management, and resource utilization might have helped them to deal with risks and their management in various aspects of agri-business. Similar findings were reported by Shilpa (2001), Rani (2014), and Chauhan and Chauhan (2012).

### Impact of finishing school in terms of managerial efficiency

A student's t-test was performed to find out a significant difference in managerial efficiency of respondents who

were exposed to and unexposed to the Finishing school program.

Table 8 reveals that the mean score of respondents for managerial efficiency who were unexposed to FS was 85.42 and those exposed to FS was 103.12. The *t*-value (6.800) was found to be greater than *t* critical value (2.00), making a significant difference in managerial efficiency. Therefore, it can be concluded that the FS program positively affected respondents. The significant difference in managerial efficiency of the two categories of respondents might be because of the various planning, organizing and project management sessions dealt with through different modules of FS.

**Table 8:** Difference in managerial efficiency of respondents who were exposed to FS and those who were not exposed to FS

Sl. No.	Dependent variables	Mean score		t-stat value	t-critical value	Inference
		Unexposed to FS	Exposed to FS			
1	Managerial efficiency	85.425	103.122	6.800	2.00	S*

S\*-significance level  $\alpha = 0.05$ .

### Identification of the major contributing factors towards managerial efficiency

In table 9 the first linear combination showed the most significant variation (0.795), which was contributed by the subcomponent organizing ability (VAR 4), followed by planning ability (VAR 1) ( 0.749) and supervising ability (VAR 3) (0.668).

**Table 9:** Eigen values for each dimensions of Managerial efficiency

Variables/Dimensions	Principal Component	
	1	2
VAR 1	0.749	-0.325
VAR 2	0.795	0.194
VAR 3	0.668	-0.327
VAR 4	0.661	-0.175
VAR 5	0.663	0.259
VAR 6	0.295	0.855

VAR 1-Planning ability VAR 3-Supervising ability VAR 5-Coordination ability; VAR 2-Organizing ability VAR 4-Communication ability VAR 6-Controlling ability.

The results highlighted that the first linear combination of the Principal component contributed 43.405 percent to the total variation, and the second linear combination contributed 17.973 percent. Thus it is clear that the first principal component accounts for the most significant percentage of variance (43.40 %) in the managerial efficiency score of respondents, and the first two principal components account for a cumulative variance of more than 60 percent (Table 10).

**Table 10:** Contribution of the principal components to the variance in managerial efficiency

Principal component	Initial Eigen values	% of variance	Cumulative %
1	2.604	43.405	43.405
2	1.078	17.973	61.379
3	0.806	13.435	74.813
4	0.596	9.939	84.753
5	0.508	8.468	93.221
6	0.407	6.779	100.00

From the findings, it might be affirmed that the organizing ability of respondents in setting up an enterprise and its management had contributed to their managerial efficiency. Also the managerial efficiency was influenced by the planning and supervising abilities of the respondent. At the same time, the other three sub-dimensions were not found to contribute significantly to the variance in managerial efficiency of respondents.

This trend in the findings might be due to the two modules namely, entrepreneurship development and enterprise attachment, which might have helped the VHSE certificate holders to develop skills in risk management and critical thinking, which resulted in setting up an enterprise and managing it. The field visits to several successful entrepreneurs might have also taught them the practicality of organizing. The findings were in line with Sreedaya *et al.* (2019).

### CONCLUSION

There was a commendable increase in the managerial efficiency of the respondents, as evident from the study. Out of the different dimensions, organizing ability has a significant effect on managerial efficiency. The student

t-test revealed a significant difference between the two categories of certificate holders concerning managerial efficiency. Therefore it can be concluded that this type of training programs must be replicated to other fields of education with utmost care and necessary modifications suitable to the respective fields.

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