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The Influence of Strategy and Learning Model toward Farmers' Awarness to Farming Entrepreneurship

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Abstract

The right of learning goes to everyone, including peasants/farmer. Learning happens all of the time, all long life. Due to that, learning is a right and obligation for all. Adult learning has reciprocal process, when teacher and student help each other. Model of learning becomes a crucial thing for the farmers/peasants for they will run the business with the information accepted when they are learning. Therefore, strategy and learning model needed to raise the awareness of the farmers to be more hard working and build their entrepreneur mental. The research conducted in Bogor and North Bengkulu district. The object of the research is agriculture instructors who live in Bogor and North Bengkulu district. The influence factors of learning strategy X3, the influence factors in learning model X4 has real influence toward Y (farmer awareness). The items used in questionnaire are able to rank farmer awareness.

Key words: Learning strategy, learning model of community development, agricultural entrepreneurship

INTRODUCTION

Agricultural sector is one of important thing to support national endurance. However, some problems come up in agricultural counseling aspect so that the farmers' interest to maximize their work to cover the need of food has not reached the goal. Many of the farmers fail to harvest just because they do not know the best method and strategy in agriculture. What they got so far from the activity of agriculture counseling was still less effective to cope farmers' problem. Herawati and Susilo's (2019) research emphasized that there is a need for a need for a competent agricultural extension agent who can guard one assist faramers and business actors agricultural area.

Everyone has a right to learn, including the farmers. The process of learning happens all of time, all of the life. Adult education has reciprocal relationship, i.e. both teacher and students help each other (Armstrong, 2012; Tilley D.J., 2012). Learning process will be effective given to the adult, when the mentor (coach, teacher, trainer, instructor, and many

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more) do not dominate much, less talk, but encourage all individuals develop alternative to improve themselves (Freeman, 2011; Vasan & DeFouw, 2012). A good mentor should try to listen and accept one's ideas, and then he/she gives respond to the questions asked.

Model of teaching learning becomes important for encouraging farmers' effort in their work by getting the information during the teaching-learning process (Millar & Warner, 2013). A teacher/mentor is a model. She/he is a central for everyone. A model is a human who plays an important role. The teacher/mentor should be impressive, adored able, loved, emulated, and being a role model for all his/her style, performance, attitude, and values. In other words, a model noticed from his attitude, either his/her overt behavior or his/her covert behavior. The saying said that a model is identically with a teacher: followed and emulated. Another important thing of being a model that he/she should have idealism.

The farmers' success to follow the learning process is a core of the activity of counseling. The change of farmers' attitude toward their independence in managing the farming becomes one of the goals in agricultural counseling. Agricultural counseling changes the paradigm counseling to manage society empowerment.

(Harper & Ross, 2011; Pappas, 2013) introduced four principles in adult learning: 1) adults have self-concept to decide, to assume responsibility and know his/her duty and role. For that reasons, it is needed to create learning atmosphere by involving the participants to identify their need, plan, teaching learning process and evaluate the progress in their learning process. 2) adults have many experiences which shape their argument and their personality. Due to the point, the learning should be used to dig their experience by focusing on practice application and lesson learned from their experience, 3) adults have readiness to learn based on the need and feeling; and 4) adults orientation in learning is direct application from learning material and learning experience designed based on problem and learner's focus.

Strategy and learning model needed to encourage farmers' awareness to be more diligent in farming and to shape their mental in entrepreneur to have abundant harvest("Using Discovery Learning to Encourage Creative Thinking," 2017). The effort to improve farmers' empowerment needs the approach and empowerment strategy precisely, such as program quality, the role of development agent, access, and support from environment and learning process. First, empowerment program for low-class farmer should be implemented continuously, not only based on project and only for helping capital and farming tools but also to lead positive attitude of the farmer (behavior, knowledge, and skill) (Rieger & Chernomas, 2013). Second, developing agent (mentor, facilitator/trainer) has vital role in empowering low-class farmers in research site(Diochon & Ghore, 2016). Third, the support

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of production input and farming tools play important role to improve farming production and crops(Agogino et al., 1992);(Diochon & Ghore, 2016).

The progress of agricultural sector influenced by the existence of agricultural counselor(Bartram et al., 2002). This can be seen from quantitative data of agricultural counselors, which still low. There are only 68.262 thousands of agricultural counselors in BPSDM, in 2016. According to BPSDM data in 2009, there are 29.065 thousands of agricultural counselors who are civil servant, only 11.368 thousands (39%) get S1 degree and they did not graduate from agricultural department. Most of the agricultural counselor graduated from senior high school and diploma. Based on the president's decision no 87/1999, the requirement of a counselor is minimum get S1 or a bachelor in agricultural field. If the counselors educational background are not sufficient, they should be mastering object, strategy, and learning model when they give training to the farmers.

This condition leads to less participation of the farmers to follow the training. Only 68% of the farmers follow the activity, so that most of the farmers do not have good knowledge in doing agricultural activity. Besides, the farmers have less motivation in doing modern agricultural, the resource is not available, and the counselor has less knowledge in agricultural field. In addition, the supporting facility in doing entrepreneur and the facility dealing with agricultural are still minim(Lemenih & Bekele, 2008).

In line with that, it is interesting to be researched how to identify the strategy and model which influence farmers' awareness to have strong mental in entrepreneur. For two particular cities, Bogor and North Bengkulu, each has excellent commodity. Bogor has the best commodity for horticultural plant, which has not developed well by the farmers. Meanwhile, North Bengkulu is the best for the plantation. For those considerations, this research conducted to try out the model and learning strategy applied for agricultural counseling. This research also produces method and effective strategy to grow farmers' entrepreneurship mental. By applying effective method and strategy, this can be generalized as pilot project of counseling process guidance for all farmers in Indonesia.

The objectives of the research as follow.

(a) To find out learning strategy used in Bogor district and North Bengkulu district
(b) To find and analysis factors influencing learning strategy toward farmers' awareness in entrepreneur in Bogor and North Bengkulu district
(c) To find and analysis factors influencing learning model toward farmers' awareness in entrepreneur in Bogor and North Bengkulu district

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(d) To implement and analysis the best strategy and model needed by the farmers in receiving the counseling material.

METHODOLOGY

The research conducted in Bogor and North Bengkulu district. Research object is agricultural counselor who lives in Bogor and North Bengkulu district. Bogor area selected for its good land for planting vegetable, particularly in Caringin site; meanhwhile North Bengkulu chosen for its good crops, particularly in Argamakmur site.

The research started in May untuk August, 2019. Research object is vegetable farmers who live in Bogor, and plantaion farmers who live in North Bengkulu.

The research used research and development (R&D) which developed strategy and agricultural counseling method(Huang et al., 2009). Analyses done to find out whether the strategy and the strategy and teaching learning model using R&D give impact toward farmers/ awareness to have entrepreneur spirit(Leek, 2001).

Data collected based on the source from library research and field research. Library research needed to dig the material and information comprehensively. Data source got from literatures and previous studies related to strategy and teaching-learning model. The method in collecting data used field research by coming to the spot and doing interview to some selected respondents. These method used tp get supporting information and to find out the real problems from the farmers Questionnaire distributed to get primary data, i.e. the strategy and teaching-learning model of the agricultural counselors. This research used sample data as a part from population. The sample chosen by simple sampling technique or purposive sampling.

Dependent variable used in this research is learning strategy (X1) and learning model (X2). Independent variabel in this research is farmers' awareness to have entrepreneurship (Y1). This research used double linear regression test to figure out the influence of strategy and teaching-learning model to encourage farmers' awareness in having entrepreneurship skill. Regression analysis used to test the influence between more than one independent variable (X) toward dependent variable (Y). The similarity of regression used to predict the value of Y to particular X (Nazir, 2013). The result of regression test measured using SPSS 20.

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RESULT AND DISCUSSION

Descriptive analysis started by distributing the frequency and percentage of the answer to each question. The questionnaire distributed to 89 respondents. Below is the resume of respondents' answer for the items in questionnaire.

1. From age aspect, most respondents' age dominated around 41-50 years old, or it is around 36%. The age between 31-40 years old is 27%, and the age between 51-60 years old is 20,2 %. The remains are age between 20-30 years old and above 60 years old.
2. From sex, the respondent dominated by men (84%) and women (16%)
3. From land status, generally respondent has his/her own land (52%), sharing profit (47%), and farm worker (1%).

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Independent variable in this research is learning strategy (X1), learning model (X2), and influence factors in learning model (X4). Each variable consists of question items with different number.

1) Independent variabel X1 (learning strategy) has 4 indicators: learning goal, learning system, learning procedure, and learning norms. The percentage of respondents answer can be seen from each table.

a. X_{11} Learning Goal

The five of indicators from this variable is perceived "agree" by the respondents. The amount of percentage from each item can be seen in the following table.

b. X_{12} Learning System

The five of indicators from this variable is perceived "agree" by the respondents. The amount of percentage from each item can be seen from the following table.

a. X_{13} Learning Procedure

The two of indicators from this variable is perceived "agree" by the respondents. The amount of percentage of each item can be seen from the following table.

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b. X_{14} Learning Norms

The two of indicators from this variable is perceived "agree" by the respondents. The amount of percentage of each item can be seen from the following table.

2) Variable of X2 has three indicators. The percentage of respondents' answer can be seen from each table

a. X_{21} Individual Model

The five of indicators from this individual model is perceived "agree" by the respondents. The amount of percentage of each item can be seen from the following table.

b. X_{22} Social Interaction Model

The five of indicators from this social interaction model is perceived "agree" by the respondents. The amount of percentage of each item can be seen from the following table.

c. X_{23} Behavior Model

The five of indicators from this behavior model is perceived "agree" by the respondents. The amount of percentage of each item can be seen from the following table.

3) Variable of X3 (influencing factors in learning strategy) has two indicators. The amount of percentage can be seen from the following table.

a. X_{31} Attitude

The five of indicators from this attitude variable is perceived "agree" by the respondents. The amount of percentage of each item can be seen from the following table.

b. X_{32} Input Availability

The four statements from input availability variable is perceived quite diverse, however, it is still dominated "agree" from the answer of respondents. The amount of the percentage of each item can be seen from the following table.

4) Variable of "X_4" (Influencing Factors in Learning Model) has three indicators. The percentage of the answer can be seen from the following table.

a. X_{41} Farmer Institution

The three statements from input availability variable is perceived quite diverse, however, it is still dominated "agree" from the answer of respondents. The amount of the percentage of each item can be seen from the following table.

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b. X_{42} Mentor Quality

The five of indicators from this mentor quality is perceived "agree" by the respondents. The amount of percentage of each item can be seen from the following table.

c. X_{43} Learning Approach

The five of indicators from this learning approach is perceived "agree" by the respondents. The amount of percentage of each item can be seen from the following table.

Farmers' Awareness as Dependent Variable: Descriptive Analysis

Dependent variable in this research is farmers' awareness. It covers Magic Awareness (Y1), Naive Awareness (Y2), and Critical Awareness (Y3).

1) Y_1 Magic Awareness

The three of statements from this variable is perceived "agree" by the respondents. The amount of percentage of each item can be seen from the following table.

2) Y_2 Naïve Awareness

The three of statements from this variable is perceived "agree" by the respondents. The amount of percentage of each item can be seen from the following table.

3) Y_3 Critical Awareness

The three of statements from this variable is perceived "less agree" by the respondents. The amount of percentage of each item can be seen from the following table.

Double Regression Model from Learning Strategy "X_1", Learning Model "X_2", Influencing Factors in Learning Strategy X_3, The Structure of Influencing Factors in Learning Model X_4 toward Farmers' Awareness (Y).

The following is summary of descriptive statistical measurement for independent variable and dependent variable.

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Descriptive Statistics

	Mean	Std. Deviation	N
Y	2.08612	.409097	89
X1	2.37471	.338175	89
X2	2.60293	.386849	89
X3	2.56433	.309989	89
X4	2.56610	.275320	89

From the table, we can see each of the average and deviation standard.

a. The Result of Double Linier Regression Test

Following is Determination Coefficient Table (R Square)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.822[a]	.675	.660	.238675	.675	43.634	4	84	.000	1.604

a. Predictors: (Constant), X4,
X1, X3, X2

b. Dependent Variable:
Y

The suitability of linier model which has R Square 0,675. This shows that the variable chosen on independent variable describes the variety of dependent variable Y with the contribution is 67,5%. The remain is about 32,5% described with another variable outside this research.

The following is F Test table.

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ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	9.943	4	2.486	43.634	.000[a]
	Residual	4.785	84	.057		
	Total	14.728	88			

a. Predictors: (Constant), X4, X1, X3, X2

b. Dependent Variable: Y

F Test used to see whether any significant influence between independent variable to dependent variable comprehensively. F test known by examining the significance F account, whether it is bigger than alpha (0,05) or not. From the result of linier regression test, it is got that F value is 3.826 with significance value is 0,000 < 0,05. It means that the four variables give significant influence to Y variable.

T Test and Colinearity Test Table

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-1.151	.263		-4.377	.000		
	X1	.471	.132	.390	3.569	.001	.325	3.080
	X2	.145	.115	.137	1.256	.213	.326	3.063
	X3	.436	.108	.330	4.028	.000	.576	1.738
	X4	.243	.121	.164	2.019	.047	.588	1.702

a. Dependent Variable: Y

If the relation of Y and X_1, X_2, X_3, X_4, tested partially using T Test, with level of confidence 95% X_1, X_3, dan X_4, has significant influence to Y, meanwhile variable X_2 doesn't give influence to Y. From the value of VIF from the two variables is smaller than 10, it can be concluded that no multicolonearity happen.

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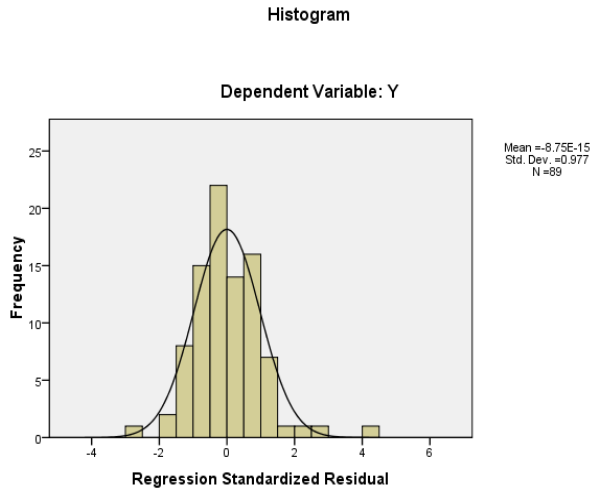
The following is the result of normality from regression error. From the two pictures, it can be seen that bar chart fits with normal curve and QQ graphs almost to linier line. It means that the assumption of regression model normality is statistically fit.



CONCLUSION

1. From the result of liner regression model analysis, it can be said that the variable of learning strategy "X_1", the influencing factors in learning strategy X_3, the structure of influencing factors learning model X_4 has significant influence to Y (farmers' awareness). The regression model is $Y = -1.151 + 0.471\,X_1 + 0.436\,X_3 + 0.243\,X_4$. This indicates that each of independent variable give weigh contribution in improving farmers' awareness as 47,1%; 43.6%; 24.3%. The suitability of liner model with determination coefficient is quite significant, i.e. 0,675. This result shows that chosen variable for independent one can describe the variety of dependent Y with the contribution 67,5%.

2. From the three of farmers' awareness variable, it can be concluded that the items used in the questionnaire can measure farmers' awareness. This is proved by the comparison of the percentage with the average. The representative of each item for the three of variables (indicated by *text highlight colour)* can be used to improve farmers' awareness directly.

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