

14. Farmers Characteristics, Ihsan Attitude, Economic Conditions and Socio-Cultural Environment Support as Activator of Farmer's Behavior to Meet Food Needs

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Farmers Characteristics, Ihsan Attitude, Economic Conditions and Socio-Cultural Environment Support as Activator of Farmer's Behavior to Meet Food Needs

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ABSTRACT

Farmers' behavior to meet the needs of food is one of the crucial things in forming the food security of a country. Indonesia is one of the agriculture-based countries whose people have quite a lot of professions as farmers. Characteristics of farmers, farmers attitude, economic condition, and socio-cultural environment support are four variables that are identified to give influence to farmer behavior. The purpose of this study is to provide an overview of the impact of these four variables on the behavior of farmers in meeting food needs and provide some suggestions to policy holders on strategic steps to empower farmers' behavior in fulfilling food needs. Using the basis of behavioral change theory, this research will use one of structural equation modeling (SEM) based analysis tools to test the relationship between variables which is called WarpPLS. This study will use a sample of 210 people where the

expected results of this study can provide theoretical and practical benefits on farmer behavior that is influenced by the four substantial variables proposed in this study. In addition ihsan attitude is also believed to be one of the novelty side in this research, where this attitude is still rarely found its application in the realm of human resources agribusiness.

Keywords: Food Security, Ihsan Attitude, Characteristics, Economic Conditions, Socio-Cultural Environment Support, Farmer Behavior

1. Introduction

Behavioral changes theory is the basic of behavioral theory which is the home to other behavioral theories such as social cognitive theory (Bandura, 1986), theory of reasoned action (Fishbein and Ajzen, 1975) and also other behavioral theories. This research will focus on the behavior of farmers. Farmers' behavior is one of the most crucial variables for

developing countries like Indonesia. This happens because the agricultural sector is still one of the main sectors that became the foundation of the economy in this country. Behavior itself is a function of personal or individual characteristics and the environment. Personal characteristics include various motive variables, values, personality traits, attitudes interacting with environmental factors in determining behavior. Environmental factors have great power in determining behavior, even its strength is greater than individual characteristics (Lewin, 1951).

In addition to behavioral changes theory, other theories identified can explain the behavioral changes that occur is persuasion theory. This theory explains that a behavior can be changed by altering the underlying beliefs of attitude (Petty et al., 1992). This theory links several variables such as characteristics, messages (information) with motivation and ability to process the information (the characteristics of information receiver). This theory is identified as highly relevant in this study because it also evaluates the agribusiness environment scheme that describes that farmers will change their behavior or not (Macgregor and Warren, 2006).

Previous researchers chose to focus on farmer behavior that was influenced by varied institutional mechanisms such as legal instruments, economic returns, provision of advice, as well as voluntary collective action (Yaffee and Wondolleck, 2000). Then there are also studies on farmer behavior that focuses on environmental empowerment such as awareness of the water resources it has (Sebatier et al., 2005). In addition there is

a study which review the existence of farmer behavior influenced by attitudes, external factors, and also the characteristics of the individual itself (Willock et al., 1999).

2. Literature Review

Food Security. According to USAID (1992), food security is a condition where everyone at all times has physical and economic access to obtain their consumption needs for healthy and productive living. Success in the fulfillment of food needs undertaken by households is determined by ownership of access to perform production activities. Meanwhile, FAO (1996) states that food security is a situation in which all households have access both physically and economically to obtain food for all members of their families, where households are not at risk of losing both accesses. Food security and stability through production activities is largely determined by the extent of the risks to physical and economic loss of access.

The people who are the most vulnerable of food security are the poor. The vulnerability is triggered by rising prices that will cause people not to meet basic food needs. In the 1970s, the aspect of food availability became a major concern in food security, but began in the 1980s switching to food access at the household and individual levels. Then entering the 1990s, the concept of food security began to include aspects of environmental sustainability (Handewi and Ariani, 2002). FAO (1996) defines the concept of food security as a situation in which every household or community has access to food, both physically and

economically to obtain food for all members of their family and households at no risk to experience loss of both accesses. This concept includes adequate food availability, food stability and food access to the main food. Adequate food availability implies that food is available in a limited amount to meet food needs. While stability refers to the conditions as difficult as any (such as in the famine season) and food consumption can be met with good and sustainable. In order to overcome the condition of food insecurity, generally households have the ability and experience to overcome from this kind of problems which is called coping strategy (copying mechanism).

Subsystems owned by food security are divided into food availability, food access, food utilization, and food stability (Weingartner, 2004) which is explained here: *Food Availability* is the availability of food in safe and nutritious quantities for all persons in a country whether originating from self-production, import, food reserves or food aid. *Food Access* is the ability of all households and individuals with the resources to obtain sufficient food for their nutritional needs that can be obtained from their own food production, purchases or through food aid. Access to households from individuals consists of economic, physical and social access. *Food Utilization* (Webb and Rogers, 2003) is the use of food for healthy living needs which includes energy and nutritional needs, water and environmental health. *Food Stability* is a time dimension of food security divided into chronic food insecurity and temporary food insecurity.

Farmers' Behavior. Behavior is a general evaluation made man himself,

object or issues (Petty and Cacioppo, 1986). This indicates that behavior is a reaction given by individuals to the stimuli they receive. Accepted stimuli can be other individuals, an object, an issue, or other things. According to Lawrence Green theory (1980), it states that human behavior is influenced by two main factors, namely behavioral factors (behaviour causes) and factors outside behavior (non-behavior causes). Furthermore, the behavior itself is determined or formed from 3 factors: *Predisposing factor* is a behavioral trigger or antecedent factor that provides a reason or motivation for that behavior that includes knowledge and attitude. *Enabling factor* is behavior that enable the motivation to be implemented, which covers the physical environment, the availability or unavailability of facilities. *Reinforcement factor* is the factor after behavior that provides a reward or continuous incentive for behavior and contribute to persistence or repetition (Notoatmodjo, 2003).

Kwick (1974) also revealed that behavior is the action of an organism that can be observed and even studied. In the context of this study, the behavior of farmers means the general evaluation held by the farmers and also the actions of the farmers after receiving a stimulus. The actions reflected in the context of this research are in the form of actions relating to their efforts in meeting the food needs of themselves and their families.

Farmers' Characteristic.

Characteristic is one of the several factors that is crucial enough to be studied considering the characteristics possessed by individual farmers are believed to be

able to give different effects on other variables such as attitudes they have. In some studies it is mentioned that characteristics such as age, length of work, education level, gender and some others are identified as being able to influence individual behavior (Sirgy, 1982; Palan 2001; Risman, 1998; Grier and Deshpande, 2001). In this study, researchers will conduct tests on these two variables because some researchers identify that this is an urgency that must be answered and explained, remembering that when we know that if the characteristics are able to give effect on the behavior of farmers, the future both the government and the other parties will be able to determine the right policy on this matter.

Ihsan Attitude. Researchers use a general attitude as the basis of the description of ihsan attitude itself. Attitude is one variable that has been studied long enough. Attitude identified was used in 1862 by Spencer. Attitude itself has the sense of being a person's mental status (Spencer, 1862). Mental status in this case relates to the mental state possessed by an individual and has an sticky trait. Sticky here can be temporary or permanent. Oppenheim (1992) defines attitudes as views or attitudes as feelings, accompanied by a tendency to act in accordance with attitudes toward the object. Then in another view states that attitude is the response given by an individual, both positive and negative responses to an object (Harvey and William, 1977).

Researchers identify that ihsan attitude has similarities with one of benevolent attitudes. Benevolent is crudely assures that agents will try to help others whenever they are asked

(Wooldridge and Jennings, 1995). Benevolent (behavior or sincerity of hearts) is a manifestation of the idea that someone will try to help others whenever needed when they are asked for help. The term ihsan attitude is mentioned in the holy Qur'an (Islam holy book) with all the changes and the pattern which is repeated 72 times spreaded in various letters and verses. The term ihsan attitude has two senses. First, give pleasure to the other party. Second, do the best (really). The manifestation of ihsan attitude can be done through the application of farmers who are able to do their job as well as possible. This attitude is identified to make an individual becomes full of responsibility in doing all his activities. In the world of work, this nature becomes one of the attitudes that are expected to be possessed by every human resource.

Economic Condition. Economic condition is one form of characteristics owned by farmers. According to Tai et al, (2012) characteristics have quite varied variation such as gender, age, education level, status, and also one of them is economic condition. Economic condition is the position occupied by individuals or families with respect to the prevailing average size of cultural ownership, effective income, ownership of goods and participation in group activities of their communities (Kaare, 1989). Economic condition is the high low prestige owned by someone based on the position achieved in a society. The characteristics possessed by an individual such as gender, age, as well as the identified economic conditions are able to influence the attitudes, needs, motivations and also the behaviors that the

individual possesses (Mathieson and Wall, 1982).

The high level of economic condition owned by farmers based on their position in the community will affect the behavior of farmers in fulfilling their family's food needs. The economic condition of farmers is measured by the amount of income received from the main job as farmers and other income and also the size of the land owned. The higher the income received by the farmers, the more land owned by the farmers, and also the more will influence the behavior of farmers to meet the needs of food for their families. The number of members of a household affects the economic capacity of a household. If we compare between a household with one family member and the household with two or more family members, of course the result of the comparison will obviously differ in their level of ability in land tenure. Thus the opportunity to earn income will be greater than the household with fewer members of the family.

Socio-Cultural Environment Support. The socio-cultural environment is an external factor that can affect farmers' ability in land management, as Delgado said notes that individual brain responses and behaviors are influenced by the circumstances surrounding the individual (Rachmat, 2002), and also it is suggested that individuals will respond the stimuli which comes from the environment in certain ways (Sarwono, 2002).

Based on the theoretical study, it is explained that the values, norms and rules prevailing in the socio-cultural environment shape the ability and regulate the behavior of farmers in the fulfillment

of food needs in managing the land so as to create harmonization or balance of interests between farmers and farmers and also farmers with nature. The ability of farmers to manage the land from shared needs among farmers to anticipate and face the problems and challenges of life and also seize the opportunities that exist around it. Therefore it is necessary to preserve the socio-cultural system and maintain and develop the ability of farmers so that land management can run well and can be maintained sustainability. With the ability of farmers to cultivate the land properly, farmers can increase production and increase farmers' income, so farmers can meet the needs of family food.

Hypotheses Development. Farmers behavior in meeting the needs of food is one of the things that are crucial enough. This is because food security is a situation where food for households or communities is sustainably sustained, reflected in the availability of adequate food, both quantity and quality, safe, equitable and accessible to the community. With farmers making changes to their behavior in relation to meet their food needs, the researchers identified that there are several variables that can give effect to this variable. First is the characteristics of farmers (Sirgy, 1982; Palan 2001; Risman, 1998; Grier and Deshpande, 2001). Characteristics such as age, length of work, education level, gender and some others are identified as being able to influence individual behavior. In those study, researchers will conduct tests on these two variables because researchers identify that this is an urgency that must be answered and explained, remembering that when we know that if the characteristics is able to

give effect on the behavior of farmers, the future both the government and the related parties will be able to determine the right policy on this matter so that the programs formulated and implemented will be absorbed more easily.

The second variable identified to have an effect on behavior is the property of the farmer (Raja and Johns, 2010; Meyer et al., 2009; Judge and Cable, 1997; Funder, 2001; Hooper et al., 1982). Some previous studies still focus on the general organizational context. Using the Big Five Personality Traits approach which consists of extraversion, agreeableness, openness, conscientiousness, and neuroticism whose dimensions are designed and proposed by many researchers such as Allport (1961). The Big Five Personality Traits will form the basis of the formation of the relationship between nature and behavior. In this study, researchers used the nature of ihsan as a featured variable. The nature of ihsan begins with the assumption that benevolent is understood as a teaching or concept that supports a good work ethic. In this perspective, the nature of ihsan in its continuation is aimed at the basic optimization of work and perform tasks in accordance with the performance of a good and high quality. In addition, human actions while they carry out all worship well and run it correctly, are also identified as an ihsan nature that is manifested in the form of interaction with others. The nature of ihsan as a predictor in this study researchers proposed as a novelty in this study, where identified no research using this trait as a variable in the context of agribusiness research. One of the strong reasons why this ihsan character is used as a predictor variable in this study is because

it is identified inherent in the subject of this study.

The third predictor variable used in this study is the economic condition of farmers which has ever been tested before (Lynne and Rola, 2010). In the study, it was identified that farmers who have higher income ownwise attitude to soil erosion that happened, so that behavior or action that appear to overcome is not maximal. Different from the case concerning the lower income farmers, they are identified more concerned about the erosion and some bad things that are happening in their environment. By looking at it, researchers will use this variable as a predictor which later results of this study will be able to describe the current situation on the subject of research, so it can be taken some appropriate policies and programs that will be implemented.

The last predictor variable used in this study, is the socio-cultural environment. In some previous studies, testing between these two variables was done in different contexts (Laird et al., 2016; Kiernan et al., 2012). The support of the socio-cultural environment is considered to be one of the important factors in influencing individual behavior. This can be seen from several previous studies that provide an explanation that the support of socio-cultural environment is able to give effect to the behavior. Support of socio-cultural environment is considered important in this study, because it will be able to contribute large enough for the formulation or implementation strategy. Based on the above explanation, the researcher formulates the hypotheses as follows: 1) Farmers' characteristics

affects the behavior of farmers to meet food needs, 2) Ihsan attitude of farmers affects the behavior of farmers to meet food needs, 3) The economic condition of farmers affects the behavior of farmers to meet food needs, 4) The socio-cultural Support environment affect the behavior of farmers to meet food needs.

3. Methodology

This research uses quantitative approach. Research with quantitative approach is a study involving the administration of a structured set of questions (statements) with predefined response options aimed at a large number of respondents (Burns and Bush, 2014). Quantitative research is also referred to as explanatory research because this study aims to prove whether there is a relationship between one variable with another variable or how a variable affects other variables. But on the other hand Burns and Bush (2014) revealed that research that focuses on causal (causal research) is usually done by using experiments to obtain data. The analysis tool used in this research is WarpPLS. The flow of use of this analytical tool will be begun by designing a structural model (inner model) involving several variables involved in this study. Then the next step is to design the measurement model (outer model) followed by constructing the path diagram and convert the path diagram to the system of equations.

4. Result And Discussion

Model Fit And Quality Indices. In the WarpPLS analysis, there is a fit model size and quality index to be met, here are the results of the analysis presented in the following table.

No	Model fit and quality indices	Fit Criteria	Analysis Result	Note
1	Average path coefficient (APC)	$P < 0.05$	0.189 $P < 0.001$	Good
2	Average R-squared (ARS)	$P < 0.05$	0.302 $P < 0.001$	Good
3	Average adjusted R-squared (AARS)	$P < 0.05$	0.312 $P < 0.001$	Good
4	Average block VIF (AVIF)	Acceptable if ≤ 5 , ideally ≤ 3.3	1.297	Good
5	Average full collinearity VIF (AFVIF)	Acceptable if ≤ 5 , ideally ≤ 3.3	1.140	Good
6	Tenenhaus GoF (GoF)	Small ≥ 0.1 , medium ≥ 0.25 , large ≥ 0.36	0.401	Good
7	Sympson's paradox ratio (SPR)	Acceptable if ≥ 0.7 , ideally = 1	1	Ideal
8	R-squared contribution ratio (RSCR)	Acceptable if ≥ 0.9 , ideally = 1	1	Ideal
9	Statistical suppression ratio (SSR)	Acceptable if ≥ 0.7	1	Good
10	Nonlinear bivariate causality direction ratio (NLBCDR)	Acceptable if ≥ 0.7	0.500	Good

Table 1
Model Fit And Quality Indices

Table 2. Validity Test

Table above shows that the overall model is fit, where after testing is done, we can identify that all criteria in the fit and quality indices model are met. In other words, the model is said to be good and can be used to explain the phenomenon (system) that is studied and can also be used for hypothesis testing. In the table above we can see that the values of APC and ARS each are 0.189 and 0.302. This shows that Average Path Coefficient (APC) and Average R-Squared (ARS) meet the fit and quality indices model. Then the AVIF (Averaged block VIF) value also shows a number smaller than that is equal to 1.297. This shows that there is no multicollinearity in the model and study. Overall the built model meets the criteria of fit and quality indices model in which the other seven variables also show criteria that meet the fit and quality indices model requirements.

Goodness of Fit Outer Model. Validity Test. The required load value for a construct to be valid is at least 0.5 (Ghozali, 2011). A model is also said to be capable of having sufficient discriminant validity if the AVE root for each construct is greater than the correlation between construct and other constructs. Here are the results of the tests performed.

No	Variabel	X1	X2	X3	X4	Y1
1	Farmer Criteria(X1)	0.799	- 0.437	0.216	- 0.317	0.331
2	Ihsan Attitude (X2)	- 0.437	0.723	- 0.212	0.445	- 0.436
3	Farmer Economic Condition(X3)	0.216	- 0.212	0.749	0.21	0.156
4	Sosio-Cultural Environment Support(X4)	- 0.317	0.445	0.210	0.651	- 0.232
5	Farmer Behavior to Meet the Food Need(Y1)	0.331	- 0.436	0.156	- 0.232	0.610

In the table above we can identify that the root value of the average variances extracted (AVE) which we can see in the numbers with bold on the main diagonal of the table, while the number outside the

Variabel	Composite Reliability	Cronbach Alpha
Farmer Criteria(X1)	0.678	0.643
Ihsan Attitude (X2)	0.797	0.669
Farmer Economic Condition(X3)	0.777	0.670
Sosio-Cultural Environment Support(X4)	0.799	0.694
Farmer Behavior to Meet the Food Need(Y1)	0.641	0.689

main diagonal is the correlation coefficient between variables. When the AVE root

1 value is greater than the correlation coefficient of the variable with other variables, then it is said that the instrument is valid. The table above shows that the research instrument in the form of questionnaires for all variables is said to be valid.

Reliability Test. The loading values required for a construct to be reliable and meet the rule of thumb are at least 0.7 (Hair et al., 2009). Here are the results of analysis in identifying the reliability value of a construct.

Table 3. Reliability Test

Based on the above table, we are able to know that all of the variables show good reliability result. Thus we can conclude that all indicators of each variable is valid and also reliable as a measure of research variables.

Factor Loading. Factor loading values on reflexive indicator model and component weight indicate the strength of the indicator as a variable measure. Indicators with factor loading values or large component weights indicate that the indicator has a strong ability to measure variables. Signs (positive or negative) indicate direction, as in the path coefficient (regression). Here are the results of the analysis of factor loading values and also the resulting direction as a reflection of the ability of indicators to measure variables, as in the following table.

Table4. IndicatorComponent Weightof Farmer Characteristic Variable (X1)

Indicator	Factor Loading	P value	Note
X1.1	0.891	<0.001	Strongest
X1.2	-0.695	<0.001	
X1.3	0.800	<0.001	

1 The table above shows that the strongest indicator (dominant) as the formative measurement of Farmer Characteristic (X1) variable is X1.1 with a factor loading of 0.891. This indicates that the axis X1.1 has a strong capability to measure the characteristics of farmers. Then it is followed by indicator X1.3 with a factor loading of 0.800 and the last is X1.2 with a factor loading of -0.695. The negative sign on indicator X1.2 indicates that the direction of measurement of indicator X1.2 is opposite.

Table5. Indicator Component Weight of Ihsan \Attitude Variable (X2)

Indicator	Factor Loading	P value	Note
X2.2	0.487	<0.001	
X2.3	0.591	<0.001	
X2.4	0.885	<0.001	
X2.5	0.880	<0.001	
X2.6	0.910	<0.001	Strongest
X2.8	-0.400	<0.001	

1 The table above shows that the strongest indicator (dominant) as the formative measure of Ihsan attitude (X2) is X2.6 with a factor loading of 0.910 almost close to 100 percent. Then the identified indicators tht are able to make good

measurements are X2.4 and X2.5 weach a factor loading as big as 0.885 and 0.880. Other variables are identified to be able to make measurements with the amount of factor loading is X2.3 and X2.2 with the factor loading as big as 0,591 and 0,487. While the indicator X2.8 is identified as an indicator that is capables of measuring with the lowest ability and also has a negative direction that is -0.400.

Table 6. Indicator Component Weight ofFarmerEconomic Condition (X3)

Indicator	Factor Loading	P value	Note
X3.1	0.392	<0.001	
X3.2	0.885	<0.001	Strongest
X3.3	0.864	<0.001	

The table above shows that the strongest indicator (dominant) as the reflective measure of Farmer Economic Condition (X3) is indicator X3.2 with factor loading as big as 0.885, then it is followed by indicators that also have strong enough ability in measuring the variable that is X3.3 indicator with a factor loading as big as 0.864. It is identified that the indicator which has the weakest ability to measure the variable is the indicator X3.1 with factor loading of 0.392.

Table 7. Indicator Component Weight of Socio-Cultural Support

Indicator	Factor Loading	P value	Note
X4.1	0.464	<0.001	
X4.2	0.534	<0.001	
X4.3	0.290	<0.001	
X4.4	0.871	<0.001	Paling kuat
X4.5	0.840	<0.001	
X4.6	0.703	<0.001	

The table above shows that the strongest indicator (dominant) as a measurement or formator is the Social Culture Support (X4), where the indicator is X4.4 with a factor loading as big as 0.871. Then it is followed by indicator X4.5 which also has a good factor loading in the measurement variable that is equal to 0.840 which is followed by the indicator X4.6 with a factor loading of 0.703. Other indicators are identified to have sufficient measurements, namely X4.2 and X4.1 indicators with each factor of 0.534 and 0.464. Meanwhile, the weakest indicator is the X4.3 indicator with a factor loading of 0,290.

Table 8. Indicator Component Weightof Farmer Behavior to Meet the Food Need (Y1)

Indicator	Factor Loading	P value	Note
Y1.1	-0.319	<0.001	
Y1.2	-0.237	<0.001	
Y1.3	-0.541	<0.001	
Y1.4	-0.331	<0.001	
Y1.5	-0.598	<0.001	
Y1.7	0.816	<0.001	
Y1.8	0.872	<0.001	Strongest
Y1.9	0.798	<0.001	

The table above shows that the strongest indicator (dominant) as the reflective measureof Farmer Behavior to Meet Food Need (Y1) is Y1.8 with a factor loading of 0.872, then it is followed by other indicators such as Y1.7 and Y1 .9 with a fairly good factor loading in the measurement of variables which are

respectively 0.816 and 0.798. Other indicators used in measuring variables of Farmer Behavior to Meet Food Needs (Y1) are identified to produce negative value such as indicator Y1.3 with a factor load of -0.541, then indicator Y1.4 with a factor loading of -0.331 followed by indicator Y1.1 and Y1.2 with each factor loading as big as -0.319 and also -0.237.

Hypotheses Testing Result.

Hypothesis testing which is a reflection of the relationship between the variables tested in this study can be seen the results in the following table.

Table 9. Hasil Pengujian Hipotesis

No	Hubungan antar Variabel (variabel penjelas → Variabel respon)		Koef. Jalur	P value	Keterangan
	Farmer Characteristic (X1)	Farmer Behavior to Meet the Food Need (Y1)			
1	Farmer Characteristic (X1)	Farmer Behavior to Meet the Food Need (Y1)	0.148*	0.003	Significant
2	Ihsan Attitude (X2)	Farmer Behavior to Meet the Food Need (Y1)	-0.430*	<0.001	Significant
3	Farmer Economic Condition (X3)	Farmer Behavior to Meet the Food Need (Y1)	0.124*	0.010	Significant
4	Socio-Cultural Environment Support (X4)	Farmer Behavior to Meet the Food Need (Y1)	-0.055 ^{ts}	0.156	Not Significant

Based on Table 9, the results of hypothesis testing are as follows:

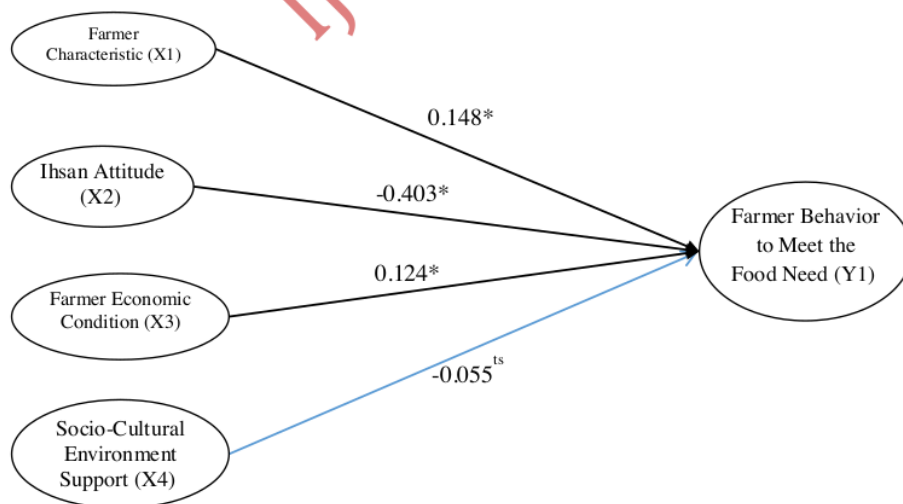
1. Farmer characteristic affect the behavior of farmers to meet food needs. The result of analysis using WarpPLS obtained coefficient path value as big as 0,148 and p-value = 0,003 which is identified significant at $\alpha = 0,05$ so that hypothesis is accepted. Path coefficient marked positive, it shows that the more positive farmer characteristic, the more positive farmer behavior to meet their food needs.
2. Ihsan attitude affects the farmer behavior to meet the needs. The results of analysis using WarpPLS obtained coefficient path value as big as -0.430 and <0.001 for p-value which is identified significant at $\alpha = 0.05$ so the hypothesis is accepted. Path coefficient is marked negative, it shows that the more Ihsan attitudes owned by farmers, then the behavior to meet their food needs more qonaah (willing to accept and always feel quite with the results obtained) or the behavior is lower.
3. Farmer's Economic Condition affects the behavior of farmers to meet the food needs. The result of analysis using WarpPLS obtained coefficient path value as big as 0,124 and 0,010 for p-value which is identified significant at $\alpha = 0,05$ so that hypothesis is accepted. Path coefficient is marked positive, it shows that the better the economic condition of farmers, the behavior of

farmers to meet food needs is getting better.

4. Socio-culture Environment Support affects the behavior of farmers to meet the food needs. The result of analysis using WarpPLS obtained coefficient path value as big as -0,055 and 0,156 for p-value which is identified significant at $\alpha = 0,05$ so that hypothesis is rejected. It shows that the Socio-Cultural Environment support does not affect the behavior of farmers to meet food needs, but there is a tendency that the greater the Support of Socio-Cultural Environment, the more qonaah (willing to accept and always feel quite with the results already cultivated) behavior to meet their food need.

Discussion. In empowering the behavior of farmers to meet the food needs as one of the pillars of the realization of national food security, it takes a lot of things that can support this. In this research, several variables that are presented such as the characteristics of farmers (X1), ihsan attitude (X2), farmers economic condition (X3), and also socio-cultural environment support (X4) are the variables based on previous studies in the different sphere. In this study, the characteristics of farmers (X1), ihsan (X2), farmers economic condition (X3) are identified can significantly influence farmers behavior to meet food needs (Y1). This can be an indication that the behavior of farmers in Bangkalan, Madura Island in meeting food needs is influenced by the characteristics they have. By knowing this, the government or related parties can formulate a policy by considering characteristics owned by farmers.

Figure 1
Model Test Result Using WarpPLS



Further research can further explore the dimensions of the characteristics that most influence the behavior of farmers to meet food needs.

Furthermore, ihsan attitude that has several indicators such as working hard, working hard and working sincerely which is a reflection of one of the characters owned by farmers in Bangkalan is identified to be able to give influence to farmers behavior for farmers food needs. This is a new finding as well as a novelty for this research, since ihsan attitude is one of the newly identified characters applied in a research model in this combination of psychology and agriculture. One of the unique things in this study is the finding that when farmers in Bangkalan have high ihsan attitude, the behavior of farmers to meet food needs will be lower. This can be open because working sincerely is the indicator that has the highest value in this research, where working sincerely means relying everything on God.

The economic condition of farmers in Bangkalan, Madura turned out to affect their behavior to meet food needs. Seeing such conditions will also greatly assist the government and related parties to formulate implementative and targeted policies through established programs. The classification of farmers' income will be a crucial factor in the implementation of the policy. The future research is also expected to further explore the economic condition into several dimensions. Then the support of social and cultural environments in Bangkalan farmers' communities was identified as having little influence on their behavior to meet food needs. This phenomenon may indicate that social and cultural environmental support

to farmers in Bangkalan is minimal so as to have an impact on their behavior to meet very small food needs.

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5. Conclusion

Based on the analysis and discussion above, the conclusion of this study are: (1) Farmer characteristic affect the behavior of farmers to meet food needs, shows that the more positive farmer characteristic, the more positive farmer behavior to meet their food needs. (2) Ihsan attitude affects the farmer behavior to meet the needs, shows that the more Ihsan attitudes owned by farmers, then the behavior to meet their food needs more qonaah (willing to accept and always feel quite with the results obtained) or the behavior is lower. (3) Farmer's economic Condition affects the behavior of farmers to meet the food needs, shows that the better the economic condition of farmers, the behavior of farmers to meet food needs is getting better. (4) Socio-culture Environment Support affects the behavior of farmers to meet the food needs, it shows that the Socio-Cultural Environment support does not affect the behavior of farmers to meet food needs, but there is a tendency that the greater the Support of Socio-Cultural Environment, the more qonaah (willing to accept and always feel quite with the results already cultivated) behavior to meet their food need.

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