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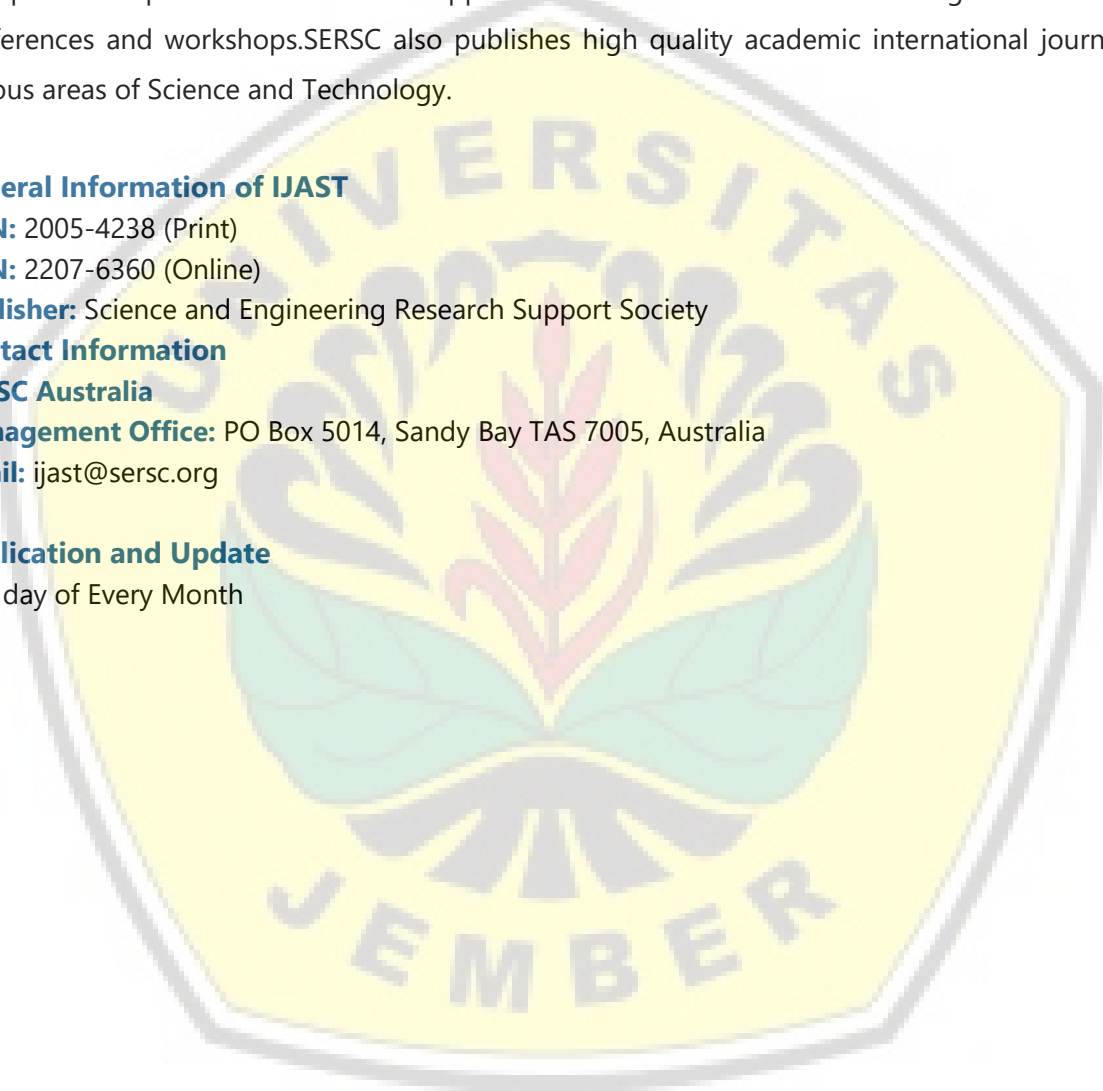
**SERSC Australia**

**Management Office:** PO Box 5014, Sandy Bay TAS 7005, Australia

**Email:** [ijast@sersc.org](mailto:ijast@sersc.org)

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## Changes In Economic Behavior Towards Organic Food Consumption In Situbondo Regency

<sup>1</sup>Yudhistira HariSandi, <sup>2</sup>Mohammad Saleh, <sup>3</sup>Herman Cahyo Diartho, <sup>4</sup>Sigit Soeparjono

<sup>1</sup>Doctoral Program in Economics Science, University of Jember, Indonesia

<sup>2, 3, 4</sup>Department of Economics, Faculty of Economics and Business, University of Jember, Indonesia

### Abstract

*The purpose of the study was conducted to determine the effect of product attributes of organic food plants as healthier food plants, and inconvenience to motivate consumption shifts through attitudes towards shifting non-organic food crop products to organic food crops. The research method uses Structural Equation Modeling (SEM) with testing using AMOS, the research sample of 250 people with a proportional random sampling method. The results of the study, Product attribute, and inconvenience have a positive and significant effect on motivation to shift consumption, while inconvenience has a negative effect. The motivation of elaborating information strengthens the effect of product attributes on attitudes towards product transition of non-organic food plants to organic food plants. In contrast, to the influence of inconvenience, the effect of moderation is not significant. The motivation of elaborating information strengthens the effect of attitudes towards product transition to the motivation for shifting consumption of non-organic food plants to organic food plants.*

**Keywords:** Economic Behavior, Product attribute, Inconvenience, Attitudes Towards Product Transition, Motivation.

### INTRODUCTION

Organic food plants are "back to nature" food products and are considered new compared to non-organic ones, so they are relatively unknown by the community. This will motivate people to search for information related to the characteristics, benefits, and how to obtain organic food plants, which will affect attitudes and motivation to consume them. Organic farming is one of the environmentally friendly technologies. Organic farming is understood as a crop production system based on biological nutrient recycling (Sutanto, 2002). The development of organic agriculture in Indonesia began in the early 1980s, which was marked by an increase in the area of organic agricultural land, and the number of Indonesian organic producers from year to year. Based on Indonesian Organic Agriculture Statistics data published by the Indonesian Organic Alliance in 2017, it is known that the total area of organic agriculture in Indonesia in 2017 is 231,687.11 Ha. The total area includes certified land area, which is 97,351.60 Ha (42.00% of the total area of organic agriculture in Indonesia) and the area of land that is still in the process of certification (pilot project), which is 132,764.85 ha (57.00 % of the total area of organic agriculture in Indonesia).

Horticulture is part of the agricultural sector consisting of vegetables, fruits, ornamental plants. Horticultural commodities, especially vegetables, play an important role in meeting human food needs. Generally, the lowland vegetable production sources are fewer in number because so far, the potential of lowland as a growing medium has not been much cultivated. Hence, it is more confident about the potential of upland vegetables as a source of vegetable production in meeting market demand (Nazaruddin, 2003). Organic vegetable plants are not only healthy for the body but also efficient in curing diseases. The body's immunity will increase and be free of toxic substances by consuming vegetables free from chemical pesticides.

The phenomenon of the low proportion of people who have the motivation to shift consumption from non-organic plants to consumption of organic plants, one of which is due to higher prices on organic food plants and scarce availability (Magnusson, 2012; Vindigni et al., 2012; Tarkianen & Sundqvist, 2005; Chen, 2009). High price differences (Zanoli R & Naspe S, 2002; Chinnici et al., 2002) and limited availability (Chinnici et al., 2002) are consumers' inconvenience to shift to organic food crops because to obtain these alternative products requires additional effort and costs (Anton et al., 2007). The higher people's perception of Inconvenience differences in product search, the lower

the positive attitude to motivate the shift in consumption of non-organic plants to organic food plants, conversely the lower the people's perception of Inconvenience differences in search, the higher the positive attitude towards product shifting.

The availability of information about the superiority of the attributes of non-organic plant products compared to organic plant products in the community, still needs to be questioned to what extent that information exists. The higher the community's understanding of the superior attributes of organic food crop products, the higher the positive attitude to shift from non-organic crops to organic food plants; conversely the lower the consumer's understanding of the superior attributes of organic food crop products, the lower the positive attitude to shift to organic food crops (Rimal & Fletcher, 2010; Thapa, 2012; Awogbem, et al, 2012). Associated with public perceptions about differences in product attributes, that it affects people's motivation to shift their consumption of these products. Theoretically, in addition to influencing through the attitude of product shifts, it also directly affects the motivation for shifting consumption. Associated with differences in inconvenience, the phenomenon that can be explained is that, in addition to influencing the attitude of product shifts, it directly affects the motivation for shifting consumption.

The condition that can be described is that if there is a high motivation to elaborate information, it will increase public involvement in understanding and evaluating product attributes. It will affect the relationship of product attributes on attitudes towards shifting consumption of non-organic plants to organic food plants (Maoz & Tybout, 2002; Chiu & Chiu, 2012).

Inconvenience related to the uncompetitive price of organic plant products and scarce availability also gives low motivation to elaborate information. Thus, it needs to be investigated to what extent this motivation is in the community. Theoretically, it can be described that if the motivation to elaborate information is high, it will increase consumer involvement in understanding and evaluating inconvenience in obtaining products, so that it will affect the relationship of inconvenience in obtaining products towards shifting attitudes of consumption of organic food crops (Maoz & Tybout, 2002; Chiu & Chiu, 2012). Opportunities for shifting community consumption from non-organic food plants to organic food plants in the future can be indicated by observing changes in community preferences for both types of food crops in the present (Sukartawi, 2008).

Associated with some understanding of the effect of changes in economic behavior on organic food consumption in Situbondo, this study was conducted to determine the effect of product attributes of organic food plants as healthier food plants, and inconvenience on motivation to shift consumption through attitudes towards shifting non-food crop products organic to organic food plants, the influence of moderation motivation to elaborate information on the effect of product attributes and the effect of inconvenience on the attitude of shifting non-organic food crop products to organic food plants, and the effect of motivation to elaborate information on the effect of shifting attitude of products on the motivation of shifting consumption of non-food crops organic to organic food plants.

## LITERATURE REVIEW

### **Relationship of Product Attribute Toward Attitudes Towards Product Transition**

The study of the consumption shift motivation model reveals the relationship between product attributes, inconvenience, motivation to elaborate information, consumption shift attitudes and consumption shift motivation, with the basic assumption that (1) the community in the consumption shift motivation process acts rationally so that the process of shifting through the cognitive component is the product attribute and Inconvenience (Thapa, 2012), (2) plant products are routine needs that are functional, the community considers the functions and benefits in deciding the purchase as an effort to avoid health risks (Baskaran & Hardley, 2002).

According to Kotler & Armstrong (2009), what is meant by product attribute is the development of a product that involves a description of the benefits for the product to be offered. Meanwhile, according to Mowen & Minor (1997), product attributes are characteristics or features that may or may not be owned by the object. The object in question can be in the form of products, people, companies, and everything where a person has trust and attitude. The credential attribute is a dimension that cannot be found before or shortly after consuming a product, including the health benefits of natural products, environmentally friendly, exclusive value, and the production process.

The higher people's perception of differences in product attributes, the higher the positive attitude to shift from non-organic plants to organic food plants, conversely the lower the consumer's



perception of differences in attributes, the lower the positive attitude to shift to organic food crops (Rimal & Fletcher, 2010; Thapa, 2012; Awogbem et al., 2012). Regarding public perceptions about differences in product attributes, the phenomenon of lack of information about organic plant products is expected to influence people's motivation to shift their consumption to these products. (Rawia et al., 2019).

Product attributes can be divided into tangible and intangible products. Tangible attributes can be features (features, design, style), while intangible attributes can be quality (durability, reliability, accuracy, and ease of operation), and support services (Kotler & Armstrong, 2009). Furthermore, the quality of products can be divided into three attributes: search, experience, and credentials (Grunert, 2002). The proposition put forward to explain the relationship between product attributes and motivation for consumption shifts is based on phenomena that tend to have positive relationship patterns, namely, the higher the consumer's perception of differences in product attributes, the higher the motivation for shifting consumption. Theoretically, in addition to influencing through the attitude of product switching, it directly also affects the motivation for shifting consumption. (Herr et al., 1991; Rimal & Fletcher, 2010; Thapa, 2012; Awogbemi et al., 2012).

In the context of the transition of non-organic plant products to organic plants, the concepts applied are more likely to be on the concept of experience and intangible attributes, especially on the concepts of experience and intelligence attributes. This is following the nature of organic plant products as part of functional plants as healthy plants can be felt after consuming it in the long term, while in the short term, it can only be distinguished when consuming it (Soekartawi, 2013).

Consumption of organic plants develops because of the perception that organic plants are healthier plants and more environmentally friendly (Wandel & Bugge, 1987; Ozcelik & Ucer, 2008), even consumers believe that organic plants are safer (safety food) compared to non-organic plants as seen from the quality of his health. Consumption of organic plants develops because of the perception that organic plants are healthier and more environmentally friendly plants, more extended durability (long-lasting), better taste (Wandel & Bugge, 1997), free of pesticides/chemicals (Swanson & Lewis, 1993; Lea & Worsley, 2005), and higher levels of safety (safety food) (Vindigni et al., 2002; Ozcelik & Ucer, 2008).

It can be concluded that what is meant by product attribute is a characteristic that distinguishes one product from another that encourages consumers to have trust and attitude towards the product concerned.

Hypothesis 1: Relationship between Product attributes and Attitudes towards product transition.

### **Relationship of Inconvenience Toward Motivation for Shifting Consumers**

Inconvenience refers to all the issues that cause consumers to obtain the desired product that needs additional effort so that it affects their decision to shift consumption motives (Grace & O'Cass, 2011). For products, in the form of Inconvenience goods can be difficult to find, high prices (Zanoli & Naspetti, 2002; Chinnici et al., 2002), low availability (Kalafatis et al., 2009; Vindigni et al., 2002; Tarlanen & Sundqvist, 2005; Chen, 2009) and the lack of alternative options (Chinnici et al., 2002) as well as cost shifts (Anton et al., 2007). High prices and low availability tend to make the motive cost of consumption shifts high. If the shift is high is a barrier to the motive for shifting consumption from one product to another (Wathne et al., 2011); conversely, if the shifting cost is low, it will further motivate consumers to shift consumption motives to other products (Anton et al., 2007).

The phenomenon of the low proportion of people who have the motivation to shift consumption from non-organic plants to consumption of organic plants, one of which is due to higher prices on organic food plants and scarce availability (Magnusson, 2012; Vindigni et al., 2012; Tarlanen & Sundqvist, 2005; Chen, 2009). High price differences (Zanoli R & Naspe S, 2002; Chinnici et al., 2002) and limited availability (Chinnici et al., 2002) are consumers' inconvenience to shift to organic food crops because to obtain these alternative products requires additional effort and costs (Anton et al., 2007).

There is a phenomenon of motivation to shift consumption, considering whether or not there is an additional effort to obtain a product. The additional effort to obtain alternative products is Inconvenience (Zanoli & Naspetti, 2002; Chinnici et al., 2002). However, if the additional effort to obtain the product is judged not to be much different, consumers tend to be motivated to make a shift in consumption (Grace & O'cass, 2011; Gerrard & Cunningham, 2004).

The proposition put forward to explain the relationship of inconvenience with the motive of shifting consumption is based on the phenomenon that tends to the negative relationship pattern, namely the higher consumer perception of Inconvenience differences in product search, the lower the positive attitude for the shifting motive of consumption to organic food plants (Chaminda, 2017).

The results of empirical research and phenomena in today's society, it can be synthesized that to obtain and consume organic food plants is very likely influenced by product attributes (less competitive prices and low availability). The higher people's perception of Inconvenience differences in product search, the higher the positive attitude to motivate the shift in consumption of non-organic plants to organic food plants, conversely the lower the people's perception of Inconvenience differences in search, the lower the positive attitude towards product switching.

Hypothesis 2: Relationship of Inconvenience with Motivation for shifting consumers.

### **The Relationship between Attitudes towards Product Transition to Motivation for Shifting Consumers**

Weigel (2013) states that attitude is an action-oriented, evaluative, knowledge-based, and relatively consistent perception of an individual concerning an object. According to Schiffman and Kanuk (2007). Attitude is the tendency to behave in a consistently good or bad manner regarding an object.

A significant predictor of consumer behavior patterns in purchasing organic food crops is an attitude that shows a positive relationship with the purchase of organic food plants (Sabha & Mesina, 2003; Thogersen, 2007; Tarlanen & Sundqvist, 2005; Chen, 2009), but the facts show that increased plant consumption organic food the proportion is still low.

Even though attitude is a consistent belief about an object, it does not mean that attitude cannot change. The strategy to change consumer attitudes can be done among others by (1) changing the evaluation relative to attributes, including by offering products with different and important attributes (2) changing brand confidence, one of which is to claim the company's brand has advantages; (3) add attributes; (4) changing attitudes as a whole, among others by changing directly to the brand; and (5) changing beliefs about competing brands, where producers bring out comparative advertising of their products, by comparing products produced with competing products (Cacioppo, Petty, & Crites, 2014).

In the context of product switching, previous studies have shown inconsistent relations between attitudes and motives, some of the results of previous studies show that switching attitudes positively influence the motivation for shifting consumption (Bansal et al, Wen, 2010; Chen and Chmotivation ao, 2011; Thapa, 2012) However, in some instances the relationship between attitude and intention can also not affect (Kalafatis et al., 2009; Vermeir & Verbeke, 2006).

It can be synthesized that the motivation for shifting consumption is influenced by one's attitude towards the possibility of product switching. The higher people's perception of differences in product attributes, the higher the positive attitude to switch products from non-organic plants to organic food plants, conversely the lower the people's perception of product attributes, the lower the positive attitude towards product switching. The inconsistency of the results of previous studies provides an opportunity to reinforce the nature of the product attribute relationship to the product switching attitude.

Hypothesis 3: Relationship between Attitudes towards product transition with motivation for shifting consumers.

### **Relationship between Product Attribute, Inconvenience, Attitudes Towards Product Transition with Motivation for Shifting Consumers Moderated Motivation to Elaborate Information**

The Likely Elaboration Model (ELM) when consumers have the ability and motivation to deal with information, the opportunity for expansion will be higher (Petty et al., 2004). The expansion of information allows information to be appropriately elaborated so that the advantages of alternative product attributes can be well understood so that it can be expected to strengthen consumers' positive attitude towards a product.

Previous studies related to the acquisition of organic plants are not easy and need additional effort due to various constraints such as prices that tend to be premium, low availability (Zanoli & Naspetti, 2002; Chinnici et al., 2002) and few choices (Chinnici et al., 2002), as well as high

consumption shift costs (Anton et al., 2007). However, intending to stay healthy and protect the environment, many consumers consume organic plants (Wandel & Bugge, 2007).

Lee et al. (2012) stated the need for alternative product marketers (substitutions) to provide broader information about the products offered, in order to motivate consumers to elaborate that information. To be able to grow the motivation to shift consumption or not, consumers will search for information regarding available products that are needed, including in determining the products that they want to consume.

Swanson and Levis, 2003; Lea & Worsley, 2005; Ozcelik & Ucer, 2008) states that these conditions indicate entrepreneurs in this industry must be able to provide confidence and motivate consumers to elaborate information that obtaining organic plants does not require additional effort. Plants not only become fulfilling hunger, but also to meet the needs of nutritional balance, taste, and also maintain health (Sabha & Mesina, 2003; Thogersen, 2007; Tarlanen & Sundqvist, 2005; Chen, 2009), even lifestyle (Chen, 2009).

The synthesis proposed is that if consumer motivation elaborates high information, it will increase its efforts in understanding and evaluating product attributes to strengthen the product attribute relationship to product switching attitudes and motivation for consumption shifts. Vice versa, if the motivation of consumers to elaborate on that information is low, it will weaken the effect of product switching attitudes on the motivation to shift consumption. Information elaboration motivation is positioned as a quasi intervening (moderator variable), meaning that this variable does not directly affect endogenous variables, but can weaken or strengthen the influence of intervening variables and the influence of both exogenous variables.

High motivation in elaborating information enables a better understanding of product characteristics so that it affects its evaluation of the product (Maoz & Tybout, 2002), which in turn will influence consumers' attitudes towards shifting consumption to alternative products offered. Previous studies related to the effect of product switching attitudes on the purchase motivation of organic plants showed a consistently positive relationship (Sabha & Mesina, 2003; Thogersen, 2007; Chen, 2009).

In the context of goods, the motive for shifting consumption occurs due to the encouragement of several variables, including attitude switching, subjective norms, behavioral control (Wen, 2010; Chen & Chao, 2011; Thapa, 2012). Subjective norms include inconvenience to obtain the desired product.

Theoretical explanations and the results of previous studies indicate that the relationship between product switching attitudes and motivation for shifting consumption to organic plants shows a positive relationship. The synthesis proposed to explain the relationship between product switching attitudes and motivation for consumption shifts is based on phenomena that tend to have positive relationship patterns. The higher the positive consumer attitudes for shifting consumption patterns, the higher the motive for shifting consumption to organic crops. The consumption shift in this dissertation can be likened to the context of goods; then, it can be analogous that the attitude of the possible attitude of product transition into a variable that mediates motivation for consumption shifts. Behavioral control, in this study, is part of the product switching attitude, so it is not a separate and independent variable.

Hypothesis 4: Relationship between Product attribute, Inconvenience, Attitudes towards product transition with motivation for shifting consumers Moderated motivation to elaborate information.

## METHODS

The study was conducted with an explanatory research approach and confirmatory research aimed at establishing relationships between one variable and another to analyze the relationships between one variable and another or how a variable affects other variables (Umar, 2002 ). This preliminary study carried out with a focused group discussion (FGD) technique element from the Situbondo Regency Government. The use of FGD techniques allows researchers to obtain broader and in-depth information from participant interactions with a particular topic to understand the participants' behavior or way of thinking (Krueger, 2002). The number of research samples as many as 250 people with sampling criteria based on the proportion of the population in each district in Situbondo, which amounted to 17 Districts from various layers of income, occupation, gender, ethnicity, and age. Data collection procedures using a questionnaire with the method of collection and



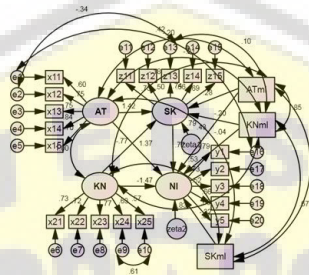
sampling using proportional random sampling (Arikunto, 2013). This research uses Structural Equation Modeling (SEM) (Wijanto, 2008) while developing and testing AMOS statistics hypotheses. Research analysis techniques using confirmatory factor analysis and regression weight approach, while the construct in this study uses exogenous, endogenous, intervening, and construct moderation.

**RESULTS AND DISCUSSION**

**Research Result**

**Structural Equation Modeling Analysis (SEM)**

SEM analysis in this study consisted of exogenous variables: product attribute (AT) and Inconvenience (KNKN), intervening variables: attitudes towards product transition (SKSK), endogenous variables: consumption shift motivation (NINI) and moderator variables Motivation to Elaborate Information (ML).



**Figure 1. SEM Test Results**  
**Source: AMOS Results Printout**

**1) The goodness of Fit Test**

The goodness of fit (GOF) test results in the study revealed that from the eight criteria used to assess whether a model is feasible or not, most of it had been fulfilled. Thus, the model is acceptable, and there is a model fit with the data.

**2) Causality Test**

The next step is to test the causality of the hypothesis developed in the model. Testing the path coefficients is presented in Table 1.

**Table 1. Causality Test Results**

Variable	Coefficient	SESE	CR	Description
AT → SK	1,346	0,581	2,316	Significant
AT → NI	0,916	0,419	2,186	Significant
KN → SK	-0,840	0,413	-2,034	Significant
KN → NINI	-1,128	0,532	-2,120	Significant
SK → NI	0,544	0,169	3,218	Significant
ATml → SK	0,135	0,062	2,177	Significant
KNml → SK	-0,100	0,166	-0,601	Not Significant
ATml → NI	0,146	0,070	2,086	Significant
KNml → NINI	-0,281	0,177	-1,583	Not Significant
SKml → NI	0,196	0,080	2,455	Significant

**Discussion**

**Effect of Product Attributes to Attitudes Towards Product Transition**

The effect of the Product attribute on the Attitudes towards the product transition is significantly positive. Product attributes of organic food plants, which by most respondents were declared better than non-organic food plants in terms of being more resistant to freshness, free of pesticides, and better nutrition content, will change attitudes towards the product transition for the better. Most respondents have attitudes towards product transition, which are also good; especially in terms of obtaining nutrients from organic food plants, the importance of consuming organic food plants for health and consuming organic food is a characteristic of modern society. Respondents'

perceptions of important indicators of these two variables have good suitability and lead to a pattern of significant positive influence relations.

This finding supports the results of research by (Rimal & Fletcher 2010; Thapa 2012; Awogbem et al. 2012). Research by Cacioppo, Petty, & Crites, 2014 also shows that improvements to product attributes can be widely and sustainably informed to the public so that the public knows and can make comparisons with competitors' products. This will generate motivation more wisely in attitudes towards product transition.

The theory of congruity illustrates the influence between two types of products, where the strengths of each other can affect each other's consumer perceptions. The Fishbein model, which is a combination of object beliefs, is related to the attributes and intensity of these beliefs, which is then modified by adding the allegation that attitudes toward subjective behavior and norms influence behavior. The attitude that is formed is usually obtained from knowledge in the form of personal experience (Blackwell, Iniard & Angel, 2010).

The attitude change strategy can be used for products with high involvement and products with low involvement. Efforts to direct the audience to products with low participation are pursued by transforming the situation toward high consumer involvement. As stated by Rest & Zahorik (2013), the strategy of changing consumer attitudes towards product switching can be carried out using persuasive communication channels that follow a sufficient communication process flow. Producers/growers of organic food plants must be able to identify, analyze, and optimize the use of factors that can influence and can cause changes in attitudes of the recipient of the message or consumers.

Information relating to tangible attributes of products (such as organic food plant features such as appearance, freshness, distinctive odor); and intangibles (such as durability, reliability, accuracy in fulfilling requests, and the ease of being processed into ready-to-consume food) must indeed be kept intensively informed to the public, so that consciously or unconsciously so that information is inherent in the subconscious, and this results in a positive attitude towards product switching (Kotler & Armstrong, 2009).

Furthermore, product quality can be divided into three attributes, namely the attributes of search, experience, and credentials (Grunert, 2002). The credential attribute is a dimension that cannot be found before or shortly after consuming a product, including the health benefits of natural products, environmentally friendly, exclusive value, and the production process.

In the context of the transition of non-organic plant products to organic plants, the concepts applied are more likely to be on the concept of experience and intangible attributes, especially on the concepts of experience and intelligence attributes.

### **Effect of Inconvenience on Attitudes Towards Product Transition**

The effect of Inconvenience on Attitudes towards product transition is significantly negative. Most respondents felt inconvenience in obtaining organic food plants for consumption, especially the level of difficulty in obtaining, limited supply, uncompetitive prices, and limited alternative product choices. Organic food products have not been well distributed in traditional markets, except for a few modern supermarkets. These things cause attitudes towards product transition to be negative. Someone will consider that there is no need to switch products because the Inconvenience factors are quite high.

This finding supports Keaveney's (2009) research, relating to the limited choices of products; product constraints are difficult to find, high prices (Zanoli & Naspetti, 2002, and Chinnici et al., 2002). Low availability in the market (Kalafatis et al., 2009; Magnusson et al., 2012; Vindigni et al., 2002; Tarlanen & Sundqvist, 2005; Chen, 2009), and few choices (Chinnici et al., 2002) and transition costs (Anton et al., 2007). Even though attitude is a consistent belief about an object, it does not mean that attitude cannot change. Changes in attitudes towards the product transition could be due to the lack of information about the superiority of organic food plants.

The strategy to change consumers' attitudes towards product switching, as suggested by The strategy to change consumer attitudes towards product switching, as suggested by Cacioppo, Petty, & Crites (2014), can be done among others by: (1) changing the evaluation relative to product attributes, for example by offering organic food products through the superiority of the importance ; (2) changing brand confidence through labeling organic food crop products; (3) adding attributes of

organic food products, for example by favoring more attractive product sizes (product sizes often attract consumers, for example: fruits larger than normal are always considered fruits from Bangkok), and (4) changing beliefs about competing brands, where manufacturers bring out comparative advertising of their products, through comparison of products produced with competing products.

### **Effect of Attitudes on Product Transition to Consumption Shift Motivation**

The influence of attitudes on product switching to motivation for consumption shifts is positive and significant. That is, if the attitude towards product switching can be pursued positively, then the motivation for shifting consumption can increase. Nowadays people are increasingly interested in foods labeled organic. In fact, not only food today, anything that is labeled organic is always selling well and looking for people in the market; for example: organic rice, organic fruit and vegetables, organic cosmetics, organic shampoo and even organic bags and clothing are hunted and a trend in society (Nursiyono; 2019).

The motivation for shifting consumption in the community can be categorized as 'quite good', this is indicated by the desire, ability and conviction to shift consumption to organic food crops. Doubts about shifting consumption to organic food crops can be considered small. Attitudes towards product switching among the community can be categorized as 'very positive', indicated by the importance of the decision to obtain good nutritious food crops, good for health, and the assumption that consuming organic food plants is a characteristic of modern society. The motivation for shifting consumption and attitudes towards product switching have similar tendencies, so the relationship between the two is positive and significant.

This finding supports the results of research and theory developed by Wandel & Bugge (2007), Sabha & Mesina (2003); Thogersen (2007); Tarlanen & Sundqvist (2005); Chen (2009), even lifestyle (Chen, 2009); but does not support the results of research Kalafatis et al (2009), and Vermeir & Verbeke (2006). In a more educated society, the view that as a modern society, consuming organic food plants is something that should be done. Health needs to be maintained by the consumption of healthy food products, free of chemical pesticides. A small number of people understand that with the increasingly narrow agricultural land for various reasons, the development of agriculture with organic cystic needs to be encouraged immediately. Thus, the community should prepare themselves to accept the idea of switching products for consumption to organic food crops.

### **Effects of Moderation Motivation on Elaborating Information.**

Motivation to elaborate information reinforces the effect of product attributes on attitudes towards product transitions. This can be explained as follows: with high motivation to elaborate information, it has inadvertently increased positive attitudes towards product switching. This explanation is consistent with the explanation of Cacioppo, Petty, & Crites (2014). The information sought is not just about the product attributes of organic plants, but also about competitors' products, production processes, product quality, and market.

Motivation to elaborate information does not significantly influence its moderation to the influence of inconvenience. That is, inconvenience is a condition that the community feels is not easy to subside because of the motivation to elaborate information. Because the level of public education is also a strong enough obstacle in elaborating that information. Someone who knows the information, sometimes his rationality remains illogical given his level of education, level of confidence in old products, or even economic conditions. Things like this cause the effect of moderation of information elaboration on the attitude of the product transition that can not be explained. This finding has never been stated by the empirical studies that are referred to in this study.

Adequate sample size (250 respondents) has produced a base structural model and interactive structural model with fairly good suitability, but it is certainly not perfect in explaining the pattern of causal-effect relationships between variables (given the model's suitability index, especially two is still categorized as marginal). This could be due to the selection of respondents with proportional random sampling, which can lead to bias caused by the level of education and economic conditions of the household. To further refine subsequent research, it is also necessary to be limited purposively, for example, at least elementary school graduates, household decision-makers, and household income strata. With purposive development, it is expected that the interaction model is not just one model, but several models based on the strata of respondents.



To develop the organic food industry, there needs to be a high level of concern for all levels of society (both producers and consumers, as well as stakeholders and policymakers in the regions). The problem of shifting consumption is not merely a household problem.

Producers must make effective strategies to disseminate information about the production process, product quality, and prices of organic food crops; so that more people have the right information. Local governments should make licensing and other supporting facilities easy for investors engaged in the organic food crop industry. A more detailed description of organic food crops can be inserted in health, agriculture, environment, and economics education at any school and college. The importance of emphasizing the emergence of insights and ideas in the community for a healthier life by consuming healthy organic food plants.

## CONCLUSION

Based on data analysis and discussion of the influence of exogenous variables on endogenous variables intervening variables and moderation variables the effect of changes in economic behavior on organic food consumption in Situbondo Regency, several conclusions can be drawn as follows:

- 1) Product attribute and inconvenience have a significant effect on the motivation to shift consumption directly and indirectly through attitudes towards product transition from non-organic food plants to organic food plants. Product attribute has a positive effect, while inconvenience has a negative effect.
- 2) Motivation to elaborate information strengthens the effect of product attributes on attitudes towards product transition of non-organic food plants to organic food plants. In contrast, the effect of moderation cannot be explained by the influence of inconvenience, given the insignificance.
- 3) Motivation to elaborate information reinforces the influence of attitudes towards product transition to the motivation for shifting consumption of non-organic food plants to organic food plants.

To local stakeholders, it is time for the organic food crop industry to be taken seriously, bearing in mind that the community is indicated to be willing and able to shift consumption to organic food crops. A product stratification policy must be made through appraisal institutions such as Sucofindo, or other institutions that have competence in this regard—involving banks to support capital for producers and farmers—conducting integrated and sustainable counseling related to organic cultivation techniques. Access marketing networks at the regional, regional, and national levels so that the market expands, empowering groups of organic food crop farmers.

To the community (farmers and consumers), increase efforts to find information relating to organic food crops, product attributes, cultivation techniques, and production processes. Encourage his family to shift their consumption to organic food crops. They are actively looking for networks and marketing areas.

To other researchers, other researchers who will research similar topics can consider the limitations of research so that they can research with better methods and results. Other researchers can try to modify the SEM model, while still considering the results of this study and the latest theoretical basis.

## REFERENCES

1. Ajzen, I and Fishben M. 2011. Understanding Attitudes and Predicting Social Behavior. Fiveth edition. Engelwood Cliftfs, New York: Prentice-Hall.
2. Ajzen, I. 2010. The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, Vol. 50 No. 2, pp. 179-211. 2010. *Attitudes, Personality and Behavior*. (2nd edition), Open University Press-McGraw Hill Education, Berkshire, UK.
3. Alford, H. 2011. *Designing & Conducting Survey Research*. SMC Institutional Research. Santa Monica College.
4. Anton, C., Camarero, C., and Carrero, M. 2007. Analysing firms' failures as determinants of consumer switching intentions, The effect of moderating factors, *European Journal of Marketing*, Vol. 41 No. 1/2, 2007 pp. 135-158
5. Armaeni Dwi Humaerah; 2013; 208 Budidaya Padi (*Oryza Sativa*) Dalam Wadah Dengan Berbagai Jenis Pupuk Pada Sistem Tanam Berbeda.
6. Armitage, C. J., and Conner, M. 2010. Social cognition models and health behaviour: A



- structured review, *Psychology and Health*, 15, 173–189. 2010. Efficacy of the Theory of Planned Behaviour: A meta-analytic review, *British Journal of Social Psychology* (2001), 40, 471–499.
7. Awogbemi, Oloda, and Osama. 2012. Modeling Brand Switching in Consumers' Products, *Journal of Economics and Sustainable Development*, Vol.3, No.12, 82-85.
  8. Bagozzi, P., R. Wong., and Abe, S. 2000. Cultural and Situational Contingencies and the Theory of Reasoned Action: Application to Fast Food Restaurant Consumption, *Journal Of Consumer Psychology*, 9 (2), 97-106.
  9. Bhaskaran, S. and Hardley, F. 2002. Buyer beliefs, attitudes and behaviour: foods with therapeutic claims, *Journal of Consumer Marketing*, Vol. 19 Iss: 7, pp.591- 606
  10. Badan Penelitian dan Pengembangan Pertanian (Juli 2002). "Prospek Pertanian Organik di Indonesia". Diakses tanggal 23 Mei 2010.
  11. Baker, Thompson, K.E, Engelken, J, and Huntley, K. 2004. Mapping the values driving organik food choice Germany vs the UK, *European Journal of Marketing*, Vol. 38 No. 8, 995-1012.
  12. Baldauf, J.S., Gerald J. Thompson, and Paul C. McArthur.2011. Agro-industry development in Asian Countries Around The Equator. *British Food Journal*, Vol. 110 No. 1, 2011 pp. 189-216.
  13. Bansal, H.S., Irving, and Taylor, S. F. 2004. Three-Component Model of Customer Commitment to Service Providers. *Journal of the Academy of Marketing Science*. Volume 32, No. 3, pages 234-250.
  14. Chen, F.M. 2009. Attitude toward organik foods among Taiwanese as related to health consciousness, environmental attitudes, and the mediating effects of a healthy lifestyle, *British Food Journal*, Vol. 111 No. 2, 2009, pp. 165-178.
  15. Chen, C. F. & Chao, W. H. 2011. Habitual or reasoned? Using the theory of planned behavior, technology acceptance model, and habit to examine switching intentions toward public transit. *Transportation Research Part F* 14, pp 128-137.
  16. Chinnici G, D'Amico M, and Pecorino B. 2002. A multivariate statistical analysis on the consumers of organik products, *British Food Journal*, Vol. 14 No. 3/4/5/, 2002, pp. 187-199.
  17. Chiu, C. C., and Chiu, T. S. 2012. The Effects of Product Attribute's New Information on Consumer Elaboration and Brand Attitude. *The Journal of International Management Studies*, Volume 7, Number 1, April, pp. 168-173.
  18. Cacioppo, J., Petty, R., and Crites, S., 2014. *Encyclopedia of Human Behavior*, Academic Press, Inc, Vol III.
  19. Grace, D., and O'Cass, A. 2011. Attributions of service switching : a study of consumers' and providers' perceptions of child-care service deliver, *Journal of Services Marketing*, Vol. 15 No. 4, pp. 300 – 321.
  20. Keaveney, S.M. 2009. Customer switching behavior in service industries: an exploratory Study, *Journal of Marketing*, Vol. 59, April, pp. 71-82.
  21. Kotler, P. and Armstrong, G. 2009. *Principles of Marketing 13th Edition*". Prentice Hall; 13 edition, New Jersey.
  22. Lee, B.G., Lee, Y. and Kim, S.J., 2008. What Is The Important Factor To Switch The Personalized Community Service? *IADIS International Conference on Web Based Communities*. ISBN: 978-972-8924-65-2 © 2008 IADIS.
  23. Herr, P. M, Kardes, F. R, and Kim, J. 1991. Effects of word of mouth and product attribute information on persuasion: an accessibility-diagnostics perspective. *Journal Of Consumer Research*, Vol. 17. pp. 454 – 462.
  24. Magnusson, M.K., Arvola, A., Hursti, U-K.,A Berg, L. and Sjöde'n, P-O. 2012. Attitudes Towards Organic Foods Among Swedish consumers, *British Food Journal*, Vol. 103 No. 3, pp. 209-226.
  25. Maoz, E and Tybout, A.M. 2002. The Moderating Role of Involvement and Differentiation in the Evaluation of Brand Extensions. *Journal Of Consumer Psychology*, 2002. 12(2), 119–131.
  26. Ozcelik AO, Ucar A. 2008. Gender differences in adult's knowledge about dietary fats, cholesterol, fiber and energy. *Pakistan Journal of Nutrition*. 7(2): 234–239.
  27. Rimal, A. P. and Fletcher, S. M. 2010. Influence of Product Attributes and Household Characteristics on Consumers' Attitude Toward and Purchase Pattern of In-shell Peanuts. *Journal of Food Distribution Research*, November, pp. 28-36.
  28. Saba, A. and Messina, F., 2003. Attitudes towards organik food and risk/benefit perception

- associated with pesticides, *Food Quality and Preference*, Vol. 14, pp. 637-645.
29. Thapa, A. 2012. Consumer Switching Behaviour : A Study Of Shampoo Brands. *National Monthly Referred Journal Of Research In Commerce & Management*, 2012.Vol. 1, Issue no. 9. Issn 2277-1166, pp. 98 – 106.
  30. Tarkianen, A. and Sundqvist, S. 2005. Subjective norms, Attitudes and Intentions of Finnish Consumers in Buying Organic Food, *British Food Journal*, 2005.Vol 107. No 11, pp. 808 – 822.
  31. Thogersen, J. 2007. “Consumer Decision Making With Regard To Organic Food Products”. in Vaz, M.T.D.N., Vaz, P., Nijkamp, P. and Rastoin, J.L. (Eds), *Traditional Food Production Facing Sustainability: A European Challenge*, Ashgate, Farnham.
  32. Vindigni G., Janssen, M. A. and Jager, W. 2002. OrganicFood Consumption, A Multi-Theoretical Framework Of Consumer Decision Making, *British Food Journal*, 2002. Vol. 104 No. 8, pp. 624-642.
  33. Wandel, M. and Bugge, A. 2012. Environmental Concern In Consumer Evaluation Of Food Quality,*Journal of Food Quality and Preference*, 2012. Vol. 8 No. 1, pp. 19-26.
  34. Zanolli, R and Naspatti, S. 2002. Consumer motivation in the purchase of organic food. A means-end approach, *British Food Journal*, 2002.Vol. 104 No. 8, 2002, pp. 643-663.

