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# UNDERSTANDING MARKET BEHAVIOR ON CORN COMMODITY: PHENOMENON IN THEAT YEAR END

Surya Darma<sup>a</sup> Yundi Permadi Hakim<sup>b</sup> Erwin Kurniawan A.<sup>c</sup> Dio Caisar Darma<sup>d</sup> Suparjo Suparjo<sup>c</sup> \*Department of Agroecotechnology, Faculty of Agriculture, Universitas Mulawarman, Indonesia. ORCID: https://orcid.org/0000-0002-1160-0576

Department of Management, Sekolah Tinggi Ilmu Ekonomi Samarinda, Indonesia.

ORCID: https://orcid.org/0000-0001-9315-4946; https://orcid.org/0000-0002-3287-7670

Department of Economics, Faculty of Economics and Business, Universitas Mulawarman, Indonesia. ORCID: https://orcid.org/0000-0003-3785-0140

Department of Geomatics Technology, Politeknik Pertanian Negeri Samarinda, Indonesia. ORCID: https://orcid.org/0000-0003-1846-6063

∮ ⊠ surya darma@faperta.unmul.ac.id (Corresponding author)

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#### **ABSTRACT**

The cause of market failure is that there is nothe lack of synchronization between demand and supply and demand, or vice versa in demand. Initially, corn was considered as a substitute and a complementary commodity for food, but now it has turned into a basic need for people in Indonesia, especially when they celebrate the new year. An obsession The main aim of this study is to examine the interaction between the demand side and the supply side. The objectivity of the study was designed carried out by inviting 9,850 respondents in Samarinda City to be reviewedsurveyed regarding interest, tradition, taste, price, opportunity, profit, production cost, and distribution. Empirical testing practices the right and measure interpretingwas used to interpret the data, including correlation, reliability, and validity. We found that there is a constructive Constructive validity was found in the market behavior function, where the indicators of consumer demand (p < 0.01) and produce supply (p < 0.01) have a significant effect. out is Also highlighted were production cost and distribution, both of which have a positive channel and are closely related to the other six indicators. The consistent performance of production cost and distribution supported further evidence providing stability of measurement only that Additionally, tradition and opportunity also have produced high coefficients in the reliability testing test. We can cor eonerete expectations to further examine empirical results by including other dimensions, such as social-factors, psychological factors, and individual factors. In addition, diagnostic transformations need to be highlighted, where market trends can change along with the growth of other commodities.

Contribution/Originality: The orientation of this study emphasizes and focuses on the increase in the demand side and supply sidesides of corn commodity. Although livestock commodities (examples.g., chicken meat) and plantation commodities (e.g., coffee and tobacco) have also increased stby the end of the year, the most popular commodity in Indonesia is corn, such as food crops. In addition, another such as corn. Another feature is that we concentrate it in the easethis study for theoffers is its focus on Samarinda City, where the market depends not only on consumer demand but also on attractive producer offers from producers.

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#### 1. INTRODUCTION

The ambition of this This study is to look looks at market anomalies in the demand for corn commodities during the year-end celebrations in Samarinda City. Generally, the end of the new year is a time wherewhen people spend a lot of time gathering with family, and friends, and partners. No exception for those who are busy with their work also feel happiness at the end of each period through various activities for fun. Celebrations at the end of the year or before the turn of the new year are moments that. New Year celebrations are often in the spotlight for some economists or and policy makers (such as Resnik & Elliott (2016); Aya (1979)). Anticipation of an increase Severe increases in a commodity commodities, services and goods must be or what they know as 'inflation' must be suppressed so that prices do not soar, thus causing 'hyper inflation' hyperinflation' (Farandy, 2020). Sometimes farmers also benefit from 'inflation' inflation from the demand aspect (Paul, Jahan, Nandi, & Rahman, 2021). It's just a matter of how producers package by offering present their goods or services at relevant prices in the market (Darma, Wijaya, & Darma, 2020).

Besides Christmas, New Year's celebrations have Year has been enthusiastically celebrated since the 18th century until now (Schmidt, 1991). It is not surprising that the increase in a product, servicedemand for products, services and goods has exploded (Yijo et al., 2021). Even though this benefits the welfare of farmers is benefited, it can cause harm for consumers can be harmed if they are not taken scriously (Darma, Maria, Lestari, & Darma, 2020). Indonesia has different cultural characteristics from other countries to eclebrate the celebration of the new year (eg. (Rianti, Novenia, Christopher, Lestari, and Parassih (2018)). The most striking difference is the consumption of food and drinks, which are less favored by most people, where Indonesian people often process corn to be used as a main dish (Wijaya, 2019). They serve these preparations grilled, fried, or boiled. The expansion, and the use of corn commodity at the turn of the year has become a special tradition for them.

According to Rosas-Castor, Guzmán-Mar, Hernández-Ramírez, Garza-González, & Hinojosa-Reyes (2014), corn, which in Latin is 'Zea mays L' (or maize) is a food crop. Corn contains a lot of carbohydrates, so it is one of the staple food sources in Indonesia after rice (Nuss & Tanumihardjo, 2010). Because corn is a favorite commodity in Indonesia, therefore-it exists fromin various community groups (Arifin, 2013). Another important thingaspect is the nature ofthat corn is easy to grow (Sandhu et al., 2020). In a global context, the average temperature to produce maize <del>oductivity r</del>anges from <del>18°C - 33°C</del>18°C-33°C with a minimum rainfall of 800 mm per year and a maximum of 2,300 mm per year (Ferrero, Mauricio, & Gonzalez-Andujar, 2014; Wang et al., 2020). With relatively cheap capital, corn production is not a big constraint. As is known, Samarinda City is the center of the East Kalimantan Province in Indonesia, which has a high level of consumptive tendencies (Wijaya, Darma, & Darma, 2020). The high level of per capita income is the major cause of main reason for the population's prosperity. They channeled channel most of their spending foron non-food needs, such as ceremonies and parties, insurance and tax collections, health and education costs (BPS of Samarinda City, 2021b; Wijaya, Zainurossalamia, & Darma, 2020). However, the factor of special habits to welcome special dayscelebrations, such as the end of the year makes, increases the need for food such as and horticultural crops also increases. Customs, traditions, and culture as a device that three have become part of history (Indriastuti, Kasuma, Zainurrosalamia, Darma, & Sawangchai, 2020). The complexity of the paper is demonstrated based on five plots, including the introduction, theoretical lens, methods, results and discussion, and conclusions.

#### 2. THEORETICAL LENS

Moss (1974) illustrates that supply and demand are the most vital parts of market economics. 'Law of demand' and 'law of supply' are basic theories that explain the interaction between sellers and buyers for a resource (Inoua & Smith, 2020). The two laws represent the relationship between the price of a service or good product, the number of people who buy it, and its availability (Parro, 2019). Both demand and supply are inversely related, which will affects the price of the goods or services sold. They These conditions are interpreted this condition as a 'demand curve' and a 'supply curve' (Safiullin, Oduntsova, & Safiullin, 2015).

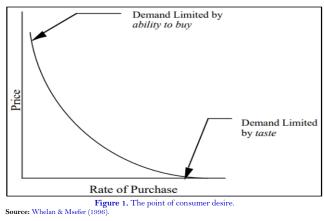
Demand is a term for the amount of goods and services that are desired to be purchased at a certain time and price level according to the market (Mazurek, García, & Rico, 2019). The 'law of demand' applies when the price of a goodproduct or service falls, and the quantity demanded increases. On the other hand, when the price of goods demanded increases, demand will decrease (Wirtz, So, Mody, Liu, & Chun, 2019). The crucial factor influencing demand is consumer tastes (Harahap, Amanah, Harahap, & Jubaidah, 2019). Increased consumer tastes trigger an increase in demand (Purcell & Lusk, 2003) as, for example, with certain fruits whose stock is scarce, of course they and will therefore be priced more expensive (Hovhanisyan, Kondaridze, Bastian, & Shanoyan, 2020). Another factor is the price of substitute or substitute goods (Milgrom & Strulovici, 2006). For example, when the price of coffee is high, people will start shifting their shopping for tea because the price is cheaperit costs less. Several factors that influence demand include the proportion of needs, prices, income levels, and population (Sorrell, 2015). Figure 1 illustrates a 'simple demand eurve'curve that relatesdemonstrates the general relationship between the number of consumer purchases of goods and services in a given period.

In contrast to demand, the 'law of supply' occurs when the price of goods rises, encouraging an increase in the supply of a service or good. If the price increases, production will supply more goods also increase, but when the price decreases, they producers are reluctant to reduce supply (Ai-Hua, 2012). The crucial factor that determines supply is the cost of production. The lower the cost of production, the cheaper the goods that can be produced, so that it and

**Comment [i-[1]:** Please check the English grammatical mistakes that highlighted in red/blue color.

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therefore supply can increase supply (such (as per the example of given by Aday & Aday (2020). Future speculation is the second factor, where predictions of future price increases allowallowing people to withhold goods or services. The last element is technology. Advances in technology will bring a product produced result in more efficiently efficient production processes.



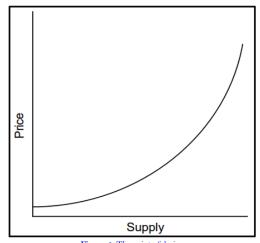


Figure 2. The point of desire.

Source: Whelan & N

Figure 2 shows the 'supply curve', if. If the slope is curving upward, it causes the price of goods and services to be expensive<u>increase</u> or <u>become</u> more difficult to <u>getobtain</u> because each additional unit is scarce. Then, <del>that is often</del> encountered is the cost of production is becomes much more expensive, therefore and the price offered is very highmuch higher than normal times usual. Unexpectedly, when prices soar, there will be is more incentives incentive to increase production (MacDonald, 2000). In The 'classical economic theory', it represents a short-run approach (Davidson, 1999)

Interestingly, supply and demand are opposites. Both will reach a point of market equilibrium when they meet each other, which is what then referred to as the 'law of demand' and the 'law of supply' (Jehle & Reny, 2011). In fact, these two laws explain the harmony between the quantity and the price offered. They then connected this to a 'demand curve' and a 'supply curve'. At a certain point in time, the supply of goods brought to the market is fixed. In other words, the 'supply curve' is a vertical line, while the 'demand curve' is always downward sloping because of the diminishing law of marginal utility. When it reaches this point of equilibrium point, the price of a commodity and its demand will be stable, even constant or not change at all (Humphrey, 1992). Sellers also can no longer raise the prices borne by consumers (Alam & Uddin, 2009). However, in the long term, they can increase or decrease the stock to change the market price to the expected level (Haugen, Talmor, & Torous, 1991).

As an extra illustration, the interaction between supply and demand in controlling the market is largely determined by sellers and buyers (Cannon & Perreault, 1999). Both react in opposite ways to changes in the price of a commodity. When the ability, price and supply of sellers also increase, while and the attention of buyers decreases, the market is clearly working (see Figure 3).

Moving on to 'microeconomic theory', an obvious example of the application of the 'law of demand' and the 'law of supply' is the level of consumption (Lee & Keen, 2004). Within the household, they are interrelated consumption with the encouragement of consumptions influenced by income ability, savings, or individual willingness. Each The needs of each household to meetare very diverse. Household consumption capacity also depends on educational background, age group, occupation, and social status. Those who are classified as 'rich' certainly have a source of living eligibility, while those who are 'poor' will rethink having contemporary goods or substitutes. In essence, they classify the needs into three categories, namely primary needs, secondary needs, and tertiary needs. If the economy is in a stable trend, it will affect welfare, and if not, what we will happen is see a decline in welfare. Social problems, such as poverty and unemployment—as, are the 'old face' of the transformation of and development. Social economic status will determine the individual's success in achieving a decent standard of living.

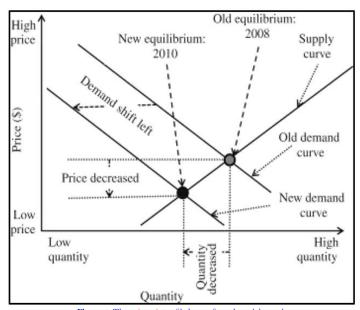


Figure 3. The points of balance of supply and demand.

I

As an actual illustration, the 2008 financial crisis in the US created new interests that caused consumption behavior, income distribution, and household debt to increase. This explains the dynamics of the crisis (Albayrak, 2020). The paradigm continues continued to flow since the 1980s, and economists assume that household consumption has decreased. Debt-based consumption and a decline in actual income followed this compensatory decline. With the help of deregulation of the financial system, at least the pattern that leads to increased debt debt and 'reduced savings'savings can be reduced. However, aggregate demand and theirthe level of consumption in the private sector remain high, so that it suffices to maintain maintains macroeconomic stability (ege.g., relatively smalllow unemployment).

Alp & Seven (2019) and Nelson (1988) highlight the stagnant wages of lower-middle distributed income households. In today's era, the exploding financial crisis has become the focus of reducing credit bubbles. In the 'consumption theory' and the 'Keynesian theory', seethere are significant correlations between consumer behavior, household debt, and inequality (Perugini, Hölscher, & Collie, 2016).

In principle, 'agricultural economic theory' focuses on cause -and -effect relationships between spatial patterns and economic decisions derived from agricultural land use. The assumption refers to farmers pursuing utility maximization in production systems (Diogo, Koomen, & Kuhlman, 2015). Then, the framework considers land use decisions (land) and alternatives in production (Kellerman, 1989).

Semerci et al. (2012) defineddefine the production function as a physical relationship between several inputs and outputs. Then, Anderson et al. (1996) enterentered the production function into only a few input variables, while other inputs are constant (ceteris paribus) as follows:

$$Q = f \left( C + L + T + Rm + \dots n \right) \tag{1}$$

Equation 1 presents connectivity in the Cobb—Douglas function type described, where Q = quantity (output), f = function, C = capital, L = labor, T = technology, Rm = raw materials, and n = other supporting variables.

Through the above formulation, farmers from various countries transactional outputs on factors that support agricultural productivity implement transactionally it. The level of demand and supply significantly influenced

Comment [i-[3]: Please explain equation 1 an others in the text followed by a suitable verb: Equation 1 presents; Equation 2 argues.

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market orientation for agricultural commodities. Consensus The relationship between consumers and producers is dominated by financial factors (Okerenta, 2005). In fact, Dwi & Nyoman (2020) argue that the government, as a regulator, seeks to encourage and promote more local agricultural products to be absorbed by the market. They expect this enthusiasm to provide social, environmental and economic benefits for the local population (Gutman, 1959). In the theory of planned behavior (Sok, Borges, Schmidt, & Ajzen, 2020), the buying behavior of agricultural commodities can be tested. Environmental The environment, local economic concerns, ethnocentrism of food safety, health, quality, and consumer perceptions influence consumer intentions (Petrea, 2001).

#### 3. METHODS

We applied this study with a social experiment approach was taken in agribusiness this study (such as Maat (2011); Syarifudin & Ishak (2020); Maman, Inawati, Aminudin, & Wastra (2017)). We focus the approach in question on and a three-step-based interview technique; was employed. The first step is data collection. We Data were collected data-through the first (primary) party. Then, the second step selects comprised the selection of the number of samples based on the population summarized in the formula below. Third, prepare a questionnaire referring towas prepared with four seales including veryanswer options: high priority (4), priority (3), moderate (2), and not priority (1). The sample size is planned intousing the following simple mathematical calculations (egg.g., (Abdullah, Gindi, Darham, & Radam, 2015; Susanto, Siswandari, & Rujito, 2019)):

$$n = \frac{N}{[1 + (N \times e^2)]} \tag{2}$$

$$n = \frac{658,525}{[1+(658,525 \times 0.01^2)]} \tag{3}$$

$$n = \frac{658,525}{[1+65.85]} \tag{4}$$

$$n = \frac{658,525}{66.85} \tag{5}$$

$$n = 9,850$$
 (6)

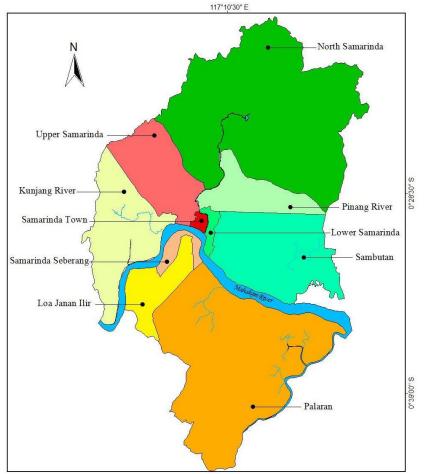


Figure 4. Road map of sample distribution.

Source: Susanto et al. (2019).

Equations 2 to 6The—as attributes to formulate the identity of the sample. Where, where n = sample, N = population, and 0.01 = margin of error. Regarding the The total population, it is the accumulationsum of the total population of various age groups (+(15± years). Launching from Prom BPS of Samarinda City (2021a), the population in Samarinda City is 827,994 people, of which 658,525 people are those with the status of the head of the family. Figure 4 displays the sample distribution model. The distribution of the sample comprises ten sub-districts in Samarinda City (64.72), including Pinang River (64.72.08), Kunjang River (64.72.06), Sambutan (64.72.07), North Samarinda (64.72.05), Samarinda Ulu (64.72). .03), Samarinda Seberang (64.72.02), Samarinda Kota (64.72.09), Samarinda Ilir (64.72.04), Palaran (64.72.01), and Loa Janan Ilir (64.72.10). Therefore, each Each sub-district will be is divided and represented by 985 respondents. Figure 4 also illustrates the coordinates of the market and the location locations for buying and selling corn commodities in Samarinda City.

It carried the identification of the interview time out during the full December 2021 This. It is important to remember that the respondents reaction to the demand for corn is relevant to the celebration of the new year. The right instrument to To make it easier for researchers to collect, samples were collected through Google Form Forms, which is promoted without social media such as WhatsApp and Facebook.

We limited the The research model was limited to the variables of consumer demand and produce supply. These as these two components are factors that influence market behavior. Each variable comprises four items. The demand side includes interests, traditions, tastes, and prices, while items such as opportunity, profit, distribution, and production costs supported support the supply side (see Figure 5-).

**Comment [i-[5]:** Explain figure 4 in the text followed by a suitable verb in the present tense: e Figure 4 illustrates, etc.

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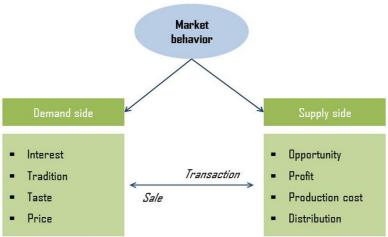


Figure 5. Conceptual framework.

Source: adapted Adapted from Naumova, Bilan, & Naumova (2019); Roufagalas (1994); Li, Wang, Yin, Kull, & Choi (2012); Xie, Gao, & Xie (2020); Sanchez (2003).

<del>loped the The</del> data processing structure <u>was developed</u> with the feasibility of testing correlation, reliability, and validity (eg.e.g., De Barros Ahrens, Da Silva Lirani, & De Francisco (2020); Dewi et al. (2021). SPSS software ealeulates was used to analyze the research findings.

# 4. RESULTS AND DISCUSSION

respondent's profile is The respondents' profiles are presented in Table 1. The sample sourced from household groups is divided into five units. Following up on this, of Of heads, 55.3 percent of them are male and 44.7 percent are female. From this number Additionally, 26 percent of the who<u>respondents</u> are single, 52.7 percent <u>are</u>married, 18.4 percent <u>are</u>divorced<del>(divorced and</del> remaining 2.8 percent are widows/widowers.

<del>ly</del>Interestingly, 40 percent of respondents <del>belongingbelong</del> to the <u>16–26</u> age group <del>of 16</del> who and consume the most corn on New Year's Eve. For extra information, The 49-59 age group has the fewest people, making up only 9.8 percent of respondents (49 59 years) is the lowest score When viewed based on their occupational background, the number of those classified as-in the labor force (already working and openly unemployed) areis far abovehigher than those classified in the non-labor force (attending school, taking care of the household, and other activities). After an in-depth analysis , the figure is 55) with figures of 65.3 percent compared to and 34.7 percents, respectively. The logical reason is that from the frequency of buying corn, as much as 3-6 kg or 41.5 percent, 41 percent is used and processed to become regular corn to accompany the turn of the new year celebrations.

Comment [i-[7]: Reinforce the all tables value

<b>Table 1.</b> Demographic of samples ( $n = 9,850$ ).					
Units	N	%			
Sex					
Female	4.403	44.7			
• Male	5.447	55.3			
Status					
Single	2.565	26			
Married	5.192	52.7			
• <del>Divorce</del> Divorced	1.816	18.4			
Widow/widower	277	2.8			
Age group					
• 16— <u>_</u> 26 years	3.940	40			
• 27—_37 years	1.189	12.1			

Comment [i-[8]: Please check again the table numbers and equations order.

Asian Journal of Agriculture and Rural Development, xx(x)2022: xxx-xxx

• 38—_48 years	2.258	22.9			
• 49—_59 years	961	9.8			
• +60 <u>+</u> years	1.502	15.2			
Main activity					
Economically active	6.431	65.3			
Economically inactive	3.419	34.7			
Purchase frequency					
• 2 kg	1.001	10.2			
• 3— <u>_</u> 6 kg	4.086	41.5			
• 7— <u>1</u> 10 kg	3.846	39			
• +11 <u>+</u> kg	917	9.3			
Diversification of corn					
Fried corn	2.594	26.3			
Roasted corn	3.217	32.7			
Boiled corn	4.039	41			

Source: Survey recapitulation

The first model describes the value of descriptive statistics and correlations. Table 2 summarizes the output mean, standard deviation (SD), and Pearson correlation. As a result, the The largest mean score is for the interest factor (M = 3.738) and the lowest is for the production cost factor (M = 2.667). In For SD calculation, the highest is the price factor (SD = 0.735), while the production cost is the lowest (SD = 0.046). Considering that causality between factors is very important, the calculation based on SPSS estimates all of them in the positive path, although not all factors have a significant effect (p < 0.01).

Table 2. Descriptive statistics and correlation matrix.

Items	Mean	SD	1	2	3	4	5	6	7	8
Interest	3.738	0.114	1	0.011 (0.473)*	0.071 (0.321)*	0.305 (0.021)*	0.167 (0.136)*	0.056 (0.358)*	0.064 (0.337)*	0.429 (0.000)*
Tradition	3.597	0.545	0.011 (0.473)*	1	0.574 (0.000)*	0.099 (0.258)*	0.136 (0.186)*	0.543 (0.000)*	0.325 (0.015)*	0.201 (0.391)*
Taste	3.602	0.396	0.071 (0.321)*	0.574 (0.000)*	1	0.174 (0.126)*	0.092 (0.275)*	0.991 (0.000)*	0.122 (0.212)*	0.656 (0.157)*
Price	3.713	0.735	0.305 (0.021)*	0.099 (0.258)*	0.174 (0.126)*	1	0.281 (0.031)*	0.166 (0.137)*	0.300 (0.023)*	0.478 (0.000)*
Opportunity	3.498	0.112	0.167 (0.136)*	0.136 (0.186)*	0.092 (0.275)*	0.281 (0.031)*	1	0.103 (0.251)*	0.437 (0.001)*	0.513 (0.417)*
Profit	3.606	0.287	0.056 (0.358)*	0.543 (0.000)*	0.981 (0.000)*	0.166 (0.137)*	0.103 (0.251)*	1	0.098 (0.261)*	0.772 (0.106)*
Production cost <u>Cost</u>	2.667	0.046	0.064 (0.337)*	0.325 (0.015)*	0.122 (0.212)*	0.300 (0.023)*	0.437 (0.001)*	0.098 (0.261)*	1	0.180 (0.097)*
Distribution	3.574	0.204	0.272 (0.013)*	0.166 (0.032)*	0.293 (0.145)*	0.317 (0.289)*	0.345 (0.167)*	0.470 (0.047)*	0.155 (0.000)*	1

Source: SPSS output, Noted: \* Note: \* p-value < 0.01.

The results of further investigations also concluded that confirmed the two-way relationship of between interest to and distribution (C = 0.429 and p = 0.000), tradition to and taste (C = 0.574 and p = 0.000), taste to and profit (C = 0.991 and p = 0.000), price with and distribution (C = 0.478 and p = 0.000), opportunity to and production cost (C = 0.437 and P = 0.001), profit to and taste (C = 0.981 and P = 0.000), production cost to and opportunity (C = 0.437 and P = 0.001), and distribution with and production cost (C = 0.155 and P = 0.000). Production costs and distribution as factors that are considered the most dominant than other of all the factors.

The second parameter is validity testing, as measured by Confirmatory Factor Analysis confirmatory factor analysis (CFA). The Kaiser\_Meyer\_Olkin Measuremeasure of Samplingsampling (KMO-MSA) is interpreted as an index of the distance comparison between the correlation coefficient and its partial correlation coefficient. If the sum of the squares of the partial correlation coefficients from all pairs of variables is small compared to the sum of the squares of the correlation coefficients, it will produce a KMO-MSA value close to 1. The KMO-MSA gain is sufficient if <i solvential it is < 0.5 (Hair, Black, Babin, Enderson, & Tatham, 2006). Another projection from Bartlett's test shows that there is a sufficient correlation between the variables to apply, provided that the p-value must be <i solvential see g., Melati (2018).

Assumptions in construct validity are based on Bartlett's test of sphericity, and content validity is determined by the KMO achievementtest. Table 3 explains that the achievement of the correlation between indicators for the

consumer demand variable is high (KMO = 0.632 and Bartlett's test = 0.000), so the factor analysis process is workable allowing the analysis to continue.

Table 3. Construct validity and content validity in the first element.

<b>Measurements</b> Measurement	<del>Values</del> Score		
KMO-MSA	0.632		
Approx. Chi-square	315.11		
<del>df</del> <u>Df.</u>	90849		
Prob.	0.000		
Source: SPSS output.			

Table 4. Construct validity and content validity in the second element.

Measurements Measurement	Score
KMO-MSA	0.580
Approx. Chi-square	207.69
<del>df</del> <u>Df.</u>	90849
Prob.	0.000

Source: SPSS output.

Overall, the achievement on the significance of Bartlett's test resulted in a p-value of 0.000 and a KMO-MSA of 0.580. This shows that both requirements meet the requirements because the KMO-MSA has a value of > 0.5 and a significance of < 0.01, so it is prioritized for the next process (see Table 4).

In the third session, identification of the assumptions assumption that must be met is reliability. We packed reliability testing with Cronbach's Alphaalpha (CA) coefficients. Classification in the CA acceptablyof Cronbach's alpha is possible if the coefficient value is > 0.7, which means that the reliability is met. It also makes sense if the coefficient is > 0.8, which suggests that all items are reliable; and all tests are internally consistent because they have strong reliability (Hoekstra, Vugteveen, Warrens, & Kruyen, 2018; Peterson, 1994). Table 5 summarizes the CA coefficient gains of Cronbach's alpha.

It can be interpreted that if the alpha coefficient is low, it is possible that one or more indicators are not reliable, so it makes sense to investigate with a per item analysis procedure. This test is a continuation of the previous series to seedetermine if certain indicators that do not meet the requirements. With Through this process, unreliable indicators can be discarded; so that other alphas can further support their value (Tavakol & Dennick, 2011).

Table 5. Cronbach's Alphaalpha for all indicators.

Items	CA	Remark
Interest	0.587	Moderate reliability
Tradition	0.749	High reliability
Taste	0.687	Moderate reliability
Price	0.682	Moderate reliability
Opportunity	0.705	High reliability
Profit	0.934	Almost perfect reliability
Production cost	0.820	High reliability
Distribution	0.717	High reliability

Source: SPSS output.

The advancement of people's perspectives and ways of thinking to determine what food is worth consuming at an affordable price? They are selectivedrawn towards selecting products with relatively cheap prices, but without neglecting the practical sidepracticality and nutritional composition. The other side is the level of need that is increasing along with accessibility. The importance of corn commodity, gives a signal to farmers that this type of plant is also easy to grow from narrow land, open space, in all seasons with sufficient light intensity, soil fertility level, and rainfall level. as shown in Figure 6.

**Comment [SP9]:** Figure 6 is just a photo and doesn't demonstrate anything that you have just listed. Consider removing.

With the harvest period in intervals of 2–3 months, it is very possible for corn farmers to achieve maximum productivity. They will certainly see the ratio of significant market demand—that is so enthusiastic, especially towards the end of the year. Each period, the consumption of corn soars sharply, so preparation for farming is earried out at least starts in September or October.

In the context of economic development and food security, the agricultural industry has played a key role for decades (Zyl, 1989). Directly, the best options are in rural areas, where a large part of the world's population also depends on this sector for their livelihoods (Udemezue & Osegbue, 2018). As the migration of people to cities and the world's population explodes, it has a systematic impact on the proportion of growth in food production.

Martin, Groenewegen, & Pidgeon (1980) detectfound that the uniqueness of market characteristics highly depends on the specifics of corn commodity in Southwestern Ontario (Canada). Corn) where corn farmers seesaw a tremendous opportunity to create welfare value. Global corn prices influenced the retail of corn-based products in the manufacturing sector (Rattray, 2012) reports that retail corn-based products in the manufacturing sector. This is a determinant of price policy by major food companies. High global corn prices have affected final retail and consumer products. Even though the market conditions for agriculture and food companies were fluctuating, they corn farmers could still benefit. Sibanda, Mushunje, & Mutengwa (2016) highlight valuable steps adopted by small-scale maize farmers in O.R.OR. Tambo and Amatole (Eastern Cape, South Africa). Samples from households were ensure to reviewasked for their response to maize. The, and the findings confirm that planning and decision-making in the maize market highly depend on seed availability, farmer perceptions, land area, income, access to credit, and access to extension services. The application of superior seeds and the absorption of corn commodities has played an important role in the productivity of corn farmers.

During the period from 1948-1970, the supply of maize acreage in the US underwent a significant change from the government's program of price intervention and acreage control. Government policies allow for the future program. Empirical analysis examines area restrictions, transfers, support, and lending rates for maize farmers. Houck & Ryan (1972) suggestsuggested that policy variables to should be selected and applied to maize as part of government priorities.

Production and land management decisions strongly influenced land conservation and crop. Farmers in the Liandaowan area (Northeast China) decidemake decisions based on motivation as a key factor in implementing government policies. Most of the farmers there insist on growing maize despite facing various obstacles, such as striking comparative advantage, farmer preferences, age and education, low temperaturetemperatures, drought, technical help, low income, and availability of machinery. The experimental results obtained by Liu, Zhang, Liu, & He (2019) emphasized that theythe need to carry outfor promotions to adjust for corn diversity because the level of demand was stable.

The theoretical justification for this finding these findings is in line with the investigations of Mišečka, Ciaian, Rajčániová, & Pokrivčák (2019). They, who emphasized that agricultural commodity prices are driving consumer attentionawareness. On an international scale, behavior towards agricultural products, such as corn, is permanently and causally connected to the demand factor. Corn, and the corn prices confirm both relationships.

Other aspects, such as campaigns against 'green consumption', brands, channels, prices and marketing strategies, can stimulate agricultural products in Wuhan (China). Yi (2017) revealed that the safety of people's lives there for agricultural products depends not only on stability but also towardson sustainable agricultural development. Farm household investigated their perception perceptions and levellevels of knowledge based on purchasing behavior, work background, income level, region, age, and gender.

The causality highlighted by Gao, Huang, Zhong, Chen, & Lu (2013) and Horská, Petril'ák, Šedík, & Nagyová (2020) regarding the sale of local agricultural products is not only influenced by the behavior of farmers, but also by the driving forces of the market. In China, in 16 villages in Anhui, Jiangsu, and Shanghai, households earn higher profits. They see economic developments in the agricultural market, thus shifting from food crops to cash crops. Aspects of capital and production costs are the more dominant input factors, where they know that if they want to getachieve a large output, then the production input becomes a big defenseinvestment. In this way, agricultural

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products gain market enthusiasm because the selling price is more significant than government subsidies. Market sales orientation supported the independence of agricultural households based on product quality improvement strategies (Hunt, 2007). Unlike the case with local farmers in Slovakia. Sales, the sales of agricultural products depend on the supply chain. AThis was driven by a short distribution route; so that the product can go directly to consumers, stimulated this. Customer loyalty is very concerned aboutmotivated by locality, freshness, and quality factors. That way, the marketing approach is a surefire technique to save time, cost, and effort.

#### 5. CONCLUSION

This study aims to analyzeanalyzed the influence of the demand side and supply sidesides on the behavior of the corn commodity market in Samarinda City. In fact, Indonesia, and it was found that the two are closely related, where as both consumers and producers respond to each other to based on the quantity of corn commodity. Towards the end of the year, demand from consumers increased in line with the supply of producers, in this case corn farmers with residents of Samarinda City. However, the supply side variable determines the market the most because the two indicators (production cost and distribution) gethave the highest coefficients with a positive path.

The This study—invention contributes to the theoretical aspect. Extension services to seasonal corn farmers in Samarinda City, at leastage not only based on certain moments (such as New Year's celebrations and eertain festivals), but also follow market patterns that follow demand trends. For the future—agenda, they needed—, there is a need for policies in distributing on distribution, training, extension, knowledge, and promotion services tefor corn farmers. We expect the implications for industry practitioners and academics to inviteattract attention to highlight and expand knowledge regarding the factors that influence market behavior for corn commodities, besides the supply and demand factors.

The <u>weakness limitation</u> of this study is <u>that it may expand-in</u> the <u>design of variables</u>, <u>used. The</u> sample range, and observation period <u>in order can be expanded</u> to produce more extensive findings. In order to support <u>socio-ceonomic socioeconomic</u> sustainability in agriculture, these findings require scientific references and foundations based on a more constructive scale.

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REFERENCES

Abdullah, A. M., Gindi, A. A., Darham, S., & Radam, A. (2015). Farmers attitudes toward risks in paddy production of north-West Selangor integrated agricultural development area (IADA), Malaysia. Asian Journal of Agriculture and rural Development, 5(7), 158-166.

Aday, S., & Aday, M. S. (2020). Impact of Covid-19 on the food supply chain. Food Quality and Safety, 4(4), 167–180. Available at: https://doi.org/10.1093/fqsafe/fyaa024.

Ai-Hua, T. (2012). Factors influencing price of agricultural products and stability countermeasures. Asian Agricultural Research, 4(4), 17-43. Available at: https://doi.org/10.22004/ag.econ.137216.

Alam, M. M., & Uddin, M. G. S. (2009). Relationship between interest rate and stock price: Empirical evidence from developed and developing countries. *International Journal of Business and Management*, 4(3), 43-51.Available at: https://doi.org/10.5539/ijbm.v4n3p43.

Albayrak, Ö. (2020). Household consumption, household indebtedness, and inequality in Turkey: A microeconometric analysis. Working Paper No. 954.

Alp, E., & Seven, Ü. (2019). The dynamics of household final consumption: The role of wealth channel. Central Bank Review, 19(1), 21-32. Available at: https://doi.org/10.1016/j.cbrev.2019.03.002.

Anderson, D. P., Chaisantikulawat, T., Guan, A. T. K., Kebbeh, M., Lin, N., & Shumway, C. R. (1996). Choice of functional form for agricultural production analysis. Review of Agricultural Economics, 18(2), 223-231. Available at: https://doi.org/10.2307/1349434.

Arifin, B. (2013). On the competitiveness and sustainability of the Indonesian agricultural export commodities. ASEAN Journal of Economics, Management and Accounting, 1(1), 81-100.

Aya, R. (1979). Theories of revolution reconsidered. Theory and Society, 8(1), 39–99. Available at: https://doi.org/10.1007/BF00156400.

BPS of Samarinda City. (2021a). Samarinda city people's welfare indicator 2020/2021 [In English: Samarinda city people's welfare indicator 2020/2021]. Retrieved from https://samarindakota.bps.go.id/publication/2021/11/23/369dd5d89366189a6de88124/indikator-kesejahteraan-rakyat-kota-samarinda-2020-2021.html.

BPS of Samarinda City. (2021b). Samarinda city in figures 2021 [in English: Samarinda Municipality in Figures 2021]. Retrieved from https://samarindakota.bps.go.id/publication/2021/02/26/fcfcfc591d2a8840ca6cacbb/kota-samarinda-dalamangka-2021.html.

Cannon, J. P., & Perreault, W. D. (1999). Buyer–seller relationships in business markets. Journal of Marketing Research, 36(4), 439–460. Available at: https://doi.org/10.1177/002224379903600404.

Darma, S., Wijaya, A., & Darma, D. C. (2020). Different tests for the existence of agricultural cooperatives in Indonesia: Before and after Covid-19. Asia Life Sciences, 10(3), 615-628. **Comment [i-[13]:** If the research article is funded by university/institute, please provide us details.

Comment [i-[14]: Please check the following references-(Wlay et al., 2018), (Canon and Perrea 1989), Nelson (1998), BPS of Samarinda City (2021), (Hoekstra, 2018).

That have been cited in the text but not provided it the reference list. Provide these reference or remothem from text. References highlighted are incomplete. Please provide complete details.

- Darma, S., Maria, S., Lestari, D., & Darma, D. C. (2020). An agroforestry consortium: A multiderminant in instituting an agrisilviculture system to improve welfare. *Virtual Economics*, 3(1), 95-111.Available at: https://doi.org/10.34021/ve.2020.03.01(5).
- Davidson, L. (1999). Reality and economic theory. Journal of Post Keynesian Economics, 18(4), 479-508. Available at: https://doi.org/10.1007/978-1-349-14991-9\_1.
- De Barros Ahrens, R., Da Silva Lirani, L., & De Francisco, A. C. (2020). Construct validity and reliability of the work environment assessment instrument WE-10. International Journal of Environmental Research and Public Health, 17(20), 7364. Available at: https://doi.org/10.3390/ijerph17207364.
- Dewi, I. G. A., Riana, I. G., Kasuma, J., McGuinness, E., Maria, S., & Darma, D. C. (2021). Predicting organizational citizenship behavior through psychological ownership and job satisfaction in four-star hotels. *GeoJournal of Tourism and Geosites*, 37(3), 807–813. Available at: https://doi.org/10.30892/gtg.37310-712.
- Diogo, V., Koomen, E., & Kuhlman, T. (2015). An economic theory-based explanatory model of agricultural land-use patterns: The Netherlands as a case study. *Agricultural Systems*, 139, 1-16. Available at: https://doi.org/10.1016/j.agsy.2015.06.002.
- Dwi, P. I., & Nyoman, Y. N. (2020). Factors affecting the purchase of local agricultural commodities. Russian Journal of Agricultural and Socio-Economic Sciences, 101(5), 47-57. Available at: https://doi.org/10.18551/rjoas.2020-05.05.
- Farandy, A. R. (2020). Analyzing factors affecting Indonesian food price inflation. *Journal of Economics and Development*, 28(1), 65-76. Available at: https://doi.org/10.14203/JEP.28.1.2020.65-76.
- Ferrero, R., Mauricio, L., & Gonzalez-Andujar, J. L. (2014). Spatio-temporal dynamics of maize yield water constraints under climate change in Spain. *PLoS One*, 9(5), e98220. Available at: https://doi.org/10.1371/journal.pone.0098220.
- Gao, S., Huang, X., Zhong, T., Chen, Z., & Lu, X. (2013). Effect of farmers' behavior on agricultural production benefits: An empirical analysis based on market driving force in China. *Journal of Food, Agriculture & Environment*, 11(2), 535-539.
- Gutman, G. O. (1959). Some aspects of the supply of agricultural products. Australian Journal of Agricultural Economics, 3(1), 11-23. Available at: https://doi.org/10.1111/j.1467-8489.1959.tb00249.x.
- Hair, J. F., Black, W. C., Babin, B. J., Enderson, R. E., & Tatham, R. L. (2006). Mutivariate data analysis (5th ed.). Upper Saddle River: Pearson Education.
- Harahap, L. K., Amanah, D., Harahap, D. A., & Jubaidah, S. (2019). Factors affecting consumer demand on orange fruit in Pantai Buaya, Langkat, Indonesia. *International Journal of Economics, Business and Management Research*, 3(11), 113-125.
- Haugen, R. A., Talmor, E., & Torous, W. N. (1991). The effect of volatility changes on the level of stock prices and subsequent expected returns. The Journal of Finance, 46(3), 985-1007. Available at: https://doi.org/10.1111/j.1540-6261.1991.tb03774.x.
- Hoekstra, A., Savenije, H., & Chapagain, A. (2001). An integrated approach towards assessing the value of water: A case study on the Zambezi Basin. *Integrated Assessment, 2*(4), 199–208. Available at: https://doi.org/10.1023/A:1013368524528.
- Hoekstra, R., Vugteveen, J., Warrens, M. J., & Kruyen, P. M. (2018). An empirical analysis of alleged misunderstandings of coefficient alpha. *International Journal of Social Research Methodology*, 22(4), 351-364.Available at: https://doi.org/10.1080/13645579.2018.1547523.
- Horská, E., Petril'ák, M., Šedík, P., & Nagyová, Ľ. (2020). Factors influencing the sale of local products through short supply chains: A case of family dairy farms in Slovakia. Sustainability, 12(20), 8499. Available at: https://doi.org/10.3390/su12208499.
- Houck, J. P., & Ryan, M. E. (1972). Supply analysis for corn in the United States: The impact of changing government programs. American Journal of Agricultural Economics, 54(2), 184-191. Available at: https://doi.org/10.2307/1238700.
- Hovhannisyan, V., Kondaridze, M., Bastian, C., & Shanoyan, A. (2020). Empirical evidence of changing food demand and consumer preferences in Russia. Journal of Agricultural and Applied Economics, 52(3), 480-501. Available at: https://doi.org/10.1017/aae.2020.13.
- Humphrey, T. M. (1992). Marshallian cross diagrams and their uses before Alfred Marshall: The origins of supply and demand geometry. Economic Review, 78(Mar), 3-23.
- Hunt, A. (2007). Consumer interactions and influences on farmers' market vendors. Renewable Agriculture and Food Systems, 22(1), 54-66. Available at: https://doi.org/10.1017/S1742170507001597.
- Indriastuti, H., Kasuma, J., Zainurrosalamia, S., Darma, D. C., & Sawangchai, A. (2020). Achieving marketing performance through acculturative product advantages: The case of sarong Samarinda. Asian Journal of Business and Accounting, 13(1), 241–261. Available at: https://doi.org/10.22452/ajba.vol13no1.9.
- Inoua, S. M., & Smith, V. L. (2020). The classical theory of supply and demand. ESI Working Paper No. 20-11.
- Jehle, G. A., & Reny, P. J. (2011). Advanced microeconomic theory (3rd ed.). Harlow: Pearson Education Limited.
- Kellerman, A. (1989). Agricultural location theory 1: basic models. Environment and Planning A: Economy and Space, 21(10), 1381–1396. Available at: https://doi.org/10.1068/a211381.
- Lee, F. S., & Keen, S. (2004). The incoherent emperor: A heterodox critique of neoclassical microeconomic theory. Review of Social Economy, 62(2), 169-199. Available at: https://doi.org/10.1080/00346760410001684433.
- Li, H., Wang, Y., Yin, R., Kull, T. J., & Choi, T. Y. (2012). Target pricing: Demand-side versus supply-side approaches. International Journal of Production Economics, 136(1), 172-184. Available at: https://doi.org/10.1016/j.ijpe.2011.10.002.
- Liu, S., Zhang, P., Liu, W., & He, X. (2019). Key factors affecting farmers' choice of corn reduction under the China's new agriculture policy in the 'Liandaowan' areas, Northeast China. Chinese Geographical Science, 29(12), 1039–1051. Available at: https://doi.org/10.1007/s11769-019-1078-3.
- Maat, H. (2011). The history and future of agricultural experiments. NJAS Wageningen Journal of Life Sciences, 57(3-4), 187-195. Available at: https://doi.org/10.1016/j.njas.2010.11.001.
- MacDonald, J. M. (2000). Demand, information, and competition: Why do food prices fall at seasonal demand peaks? The Journal of Industrial Economics, 48(1), 27-45. Available at: https://doi.org/10.1111/1467-6451.00111.
- Maman, U., Inawati, I., Aminudin, I., & Wastra, A. R. (2017). The need of tailor made agribusiness farmer field school to develop entrepreneurship: The experience from paddy seed growers in Indonesia context. *Journal of Engineering and Applied Sciences*, 12(10), 2676-2681. Available at: https://doi.org/10.3923/jeasci.2017.2676.2681.
- Martin, L., Groenewegen, J. L., & Pidgeon, E. (1980). Factors affecting corn basis in Southwestern Ontario. American Journal of Agricultural Economics, 62(1), 107-112. Available at: https://doi.org/10.2307/1239477.

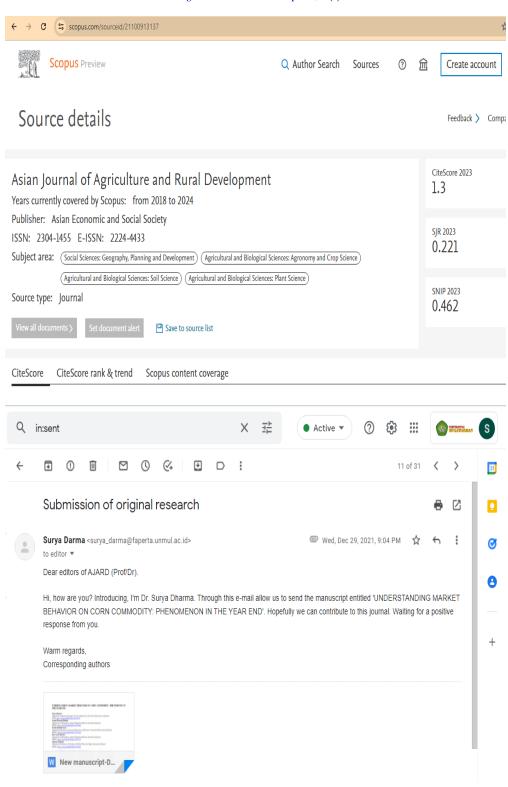
- Mazurek, J., García, C. F., & Rico, C. P. (2019). The law of demand and the loss of confidence effect: An experimental study. Heliyon, 5(11), e02685. Available at: https://doi.org/10.1016/j.heliyon.2019.e02685.
- Melati, R. (2018). The effect of perceptions about health product advertorials in newspapers on consumer attitudes. *Journal of Science and Health*, 1(10), 561-569. Available at: https://doi.org/10.25026/jsk.v1i10.91.
- Milgrom, P., & Strulovici, B. (2006). Concepts and properties of substitute goods. Economics Papers 2006-W02. Economics Group, Nuffield College, University of Oxford. Retrieved from: https://www.researchgate.net/publication/5201153\_Concepts\_and\_Properties\_of\_Substitute\_Goods.
- Mišečka, T., Ciaian, P., Rajčániová, M., & Pokrivčák, J. (2019). In search of attention in agricultural commodity markets. *Economics Letters*, 184, 108668. Available at: https://doi.org/10.1016/j.econlet.2019.108668.
- Moss, L. S. (1974). Mountifort Longfield's supply-and-demand theory of price and its place in the development of British economic theory. *History of Political Economy*, 6(4), 405–434. Available at: https://doi.org/10.1215/00182702-6-4-405.
- Naumova, O., Bilan, S., & Naumova, M. (2019). Luxury consumers' behavior: A cross-cultural aspect. *Innovative Marketing*, 15(4), 1-13. Available at: https://doi.org/10.21511/im.15(4).2019.01.
- Nelson, J. A. (1988). Household economies of scale in consumption: Theory and evidence. *Econometrica*, 56(6), 1301-1314. Available at: https://doi.org/10.2307/1913099.
- Nuss, E. T., & Tanumihardjo, S. A. (2010). Maize: A paramount staple crop in the context of global nutrition. Comprehensive Reviews in Food Science and Food Safety, 9(4), 417-436. Available at: https://doi.org/10.1111/j.1541-4337.2010.00117.x.
- Okerenta, S. J. (2005). Factors affecting demand and supply of agricultural credit to farmers in Rivers State of Nigeria. *Journal of Agriculture, Forestry and the Social Sciences*, 3(1), 26-34. Available at: https://doi.org/10.4314/joafss.v3i1.33702.
- Parro, F. (2019). Understanding the supply and demand forces behind the fall and rise in the us skill premium. Macroeconomic Dynamics, 23(6), 2191-2220. Available at: https://doi.org/10.1017/S1365100517000669.
- Paul, S. C., Jahan, N., Nandi, A. K., & Rahman, A. (2021). Nexus between FDI, agriculture, and rural development: Evidence from Asian countries. Asian Journal of Agriculture and Rural Development, 11(4), 311-319. Available at: https://doi.org/10.18488/journal.ajard.2021.114.311.319.
- Perugini, C., Hölscher, J., & Collie, S. (2016). Inequality, credit and financial crises. Cambridge Journal of Economics, 40(1), 227–257. Available at: https://doi.org/10.1093/cje/beu075.
- Peterson, R. A. (1994). A meta-analysis of Cronbach's coefficient alpha. *Journal of Consumer Research*, 21(2), 381-391. Available at: https://doi.org/10.1086/209405.
- Petrea, R. E. (2001). The theory of planned behavior: Use and application in targeting agricultural safety and health interventions. Journal of Agricultural Safety and Health, 7(1), 7-19. Available at: https://doi.org/10.13031/2013.2603.
- Purcell, W. D., & Lusk, J. (2003). Demand for red meats: Principles, research evidence, and issues the veterinary clinics of North America. Food Animal Practice, 19(2), 463–468. Available at: https://doi.org/10.1016/s0749-0720(03)00027-6.
- Rattray, J. (2012). The implications of the increasing global demand for corn. UW-L Journal of Undergraduate Research, 15(2012), 1-10.
- Resnik, D. B., & Elliott, K. C. (2016). The ethical challenges of socially responsible science. Accountability in Research, 23(1), 31–46. Available at: https://doi.org/10.1080/08989621.2014.1002608.
- Rianti, A., Novenia, A. E., Christopher, A., Lestari, D., & Parassih, E. K. (2018). Ketupat as traditional food of Indonesian culture. Journal of Ethnic Foods, 5(1), 4–9. Available at: https://doi.org/10.1016/j.jef.2018.01.001.
- Rosas-Castor, J. M., Guzmán-Mar, J. L., Hernández-Ramírez, A., Garza-González, M. T., & Hinojosa-Reyes, L. (2014). Arsenic accumulation in maize crop (Zea mays): A review. Science of the Total Environment, 488-489C(1), 176-187. Available at: https://doi.org/10.1016/j.scitotenv.2014.04.075.
- Roufagalas, J. (1994). Price rigidity: An exploration of the demand side. Managerial and Decision Economics, 15(1), 87-94. Available at: https://doi.org/10.1002/mde.4090150110.
- Safiullin, L. N., Oduntsova, J. L., & Safiullin, N. Z. (2015). The theory of demand in the conditions of heterogeneity of goods and consumers. *Procedia Economics and Finance*, 24, 288-295. Available at: https://doi.org/10.1016/S2212-5671(15)00662-0.
- Sanchez, R. (2003). Integrating transaction costs theory and real options theory. Managerial and Decision Economics, 24(4), 267–282. Available at: https://doi.org/10.1002/mde.1124.
- Sandhu, H., Scialabba, N. E., Warner, C., Behzadnejad, F., Keohane, K., Houston, R., & Fujiwara, D. (2020). Evaluating the holistic costs and benefits of corn production systems in Minnesota, US. Scientific Reports, 10(1), 3922. Available at: https://doi.org/10.1038/s41598-020-60826-5.
- Schmidt, L. E. (1991). The commercialization of the calendar: American holidays and the culture of consumption, 1870–1930. Journal of American History, 78(3), 887–916. Available at: https://doi.org/10.2307/2078795.
- Semerci, A., Mazid, A., Amegbeto, K., Keser, M., Morgounov, A., Peker, K., & Kan, M. (2012). The production functions of wheat production in Turkey. Bulgarian Journal of Agricultural Science, 18(2), 240-253.
- Sibanda, M., Mushunje, A., & Mutengwa, C. S. (2016). Factors influencing the demand for improved maize open pollinated varieties (OPVs) by smallholder farmers in the Eastern Cape Province, South Africa. *Journal of Cereals and Oilseeds*, 7(2), 14–26.Available at: https://doi.org/10.5897/JCO2015.0142.
- Sok, J., Borges, J. R., Schmidt, P., & Ajzen, I. (2020). Farmer behaviour as reasoned action: A critical review of research with the theory of planned behaviour. Journal of Agricultural Economics, 72(2), 388-412. Available at: https://doi.org/10.1111/1477-9552.12408.
- Sorrell, S. (2015). Reducing energy demand: A review of issues, challenges and approaches. Renewable and Sustainable Energy Reviews, 47, 74-82. Available at: https://doi.org/10.1016/j.rser.2015.03.002.
- Susanto, Z. A., Siswandari, W., & Rujito, L. (2019). Cd60 (GTG > GAG)/Hb Cagliari mutation was found in scanning of β-thalassemia alleles from patients of East Kalimantan, Indonesia. *Molecular Genetics and Metabolism Reports*, 22, 100550.Available at: https://doi.org/10.1016/j.ymgmr.2019.100550.
- Syarifudin, D., & Ishak, R. F. (2020). The importance of rural social productive space to increase the social capital of agribusiness community in agropolitan area. Regional and Environmental Journal, 8(1), 67-83. Available at: http://dx.doi.org/10.14710/jwl.8.1.67-83.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. International Journal of Medical Education, 2, 53–55. Available at: https://doi.org/10.5116/ijme.4dfb.8dfd.

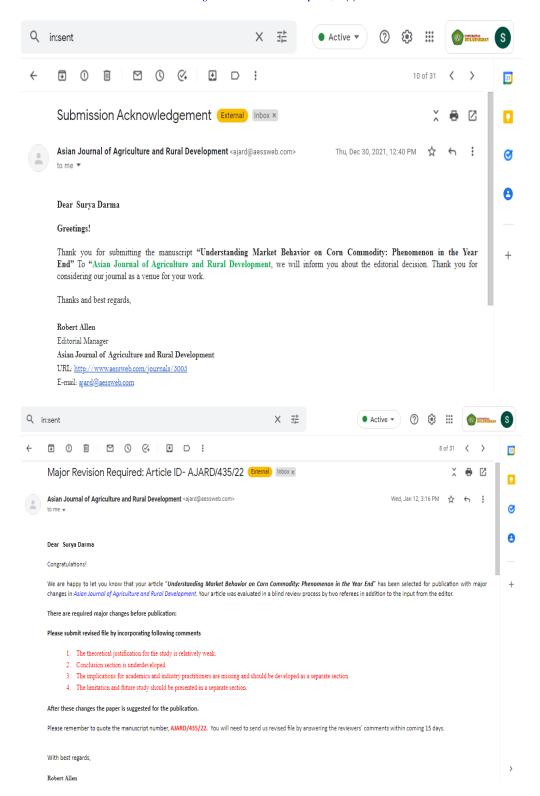
- Udemezue, J., & Osegbue, E. (2018). Theories and models of agricultural development. Annals of Reviews and Research, 1(5), 555574.Available at: https://doi.org/10.19080/arr.2018.01.555574.
- Wang, T., Du, C., Nie, T., Sun, Z., Zhu, S., Feng, C., & Liang, Q. (2020). Spatiotemporal analysis of maize water requirement in the Heilongjiang Province of China during 1960-2015. Water, 12(9), 2472.Available https://doi.org/10.3390/w12092472.
- Whelan, J., & Msefer, K. (1996). Economic supply & demand. MIT System Dynamics in Education Project. Retrieved from https://ocw.mit.edu/courses/sloan-school-of-management/15-988-system-dynamics-self-study-fall-1998-spring-1999/readings/economics.pdf.
- Wijaya, A., Zainurossalamia, S., & Darma, D. C. (2020). Life-cycle hypothesis for consumption pattern: Example from Indonesia. International Journal of Advanced Science and Technology, 29(4), 4712-4720.
- Wijaya, S. (2019). Indonesian food culture mapping: A starter contribution to promote Indonesian culinary tourism. Journal of
- Ethnic Foods, 6(1), 9.Available at: https://doi.org/10.1186/s42779-019-0009-3.
  Wijaya, A., Darma, S., & Darma, D. C. (2020). Spatial interaction between regions: Study of the East Kalimantan Province, Indonesia. International Journal of Sustainable Development and Planning, 15(6), 937-950. Available at: https://doi.org/10.18280/ijsdp.150618.
- Wirtz, J., So, K. K. F., Mody, M. A., Liu, S. Q., & Chun, H. H. (2019). Platforms in the peer-to-peer sharing economy. Journal of Service Management, 30(4), 452-483. Available at: https://doi.org/10.1108/JOSM-11-2018-0369.
- Xie, F., Gao, L., & Xie, P. (2020). Supply-side structural reforms from the perspective of global production networks based on the theoretical logic and empirical evidence of political economy. China Political Economy, 3(1), 93-119. Available at: https://doi.org/10.1108/CPE-05-2020-0008.
- Yi, F. (2017). Research on the factors affecting consumer purchase behavior of green agricultural products. Advances in Social
- Science, Education and Humanities Research, 156, 445-448. Available at: https://doi.org/10.2991/seiem-17.2018.111.
  Yijo, S., Asnawati, A., Darma, S., Achmad, G. N., Arizandi, M. A. P., Hidayati, T., & Darma, D. C. (2021). Social experiments on problems from tomato farmers during Covid-19-Indonesia case. SAR Journal - Science and Research, 4(1), 7-13.Available at: https://doi.org/10.18421/SAR41-02.
- Zyl, J. (1989). Agricultural development principles: Economic theory and empirical evidence. Development Southern Africa, 6(1), 119-121. Available at: https://doi.org/10.1080/03768358908439452.

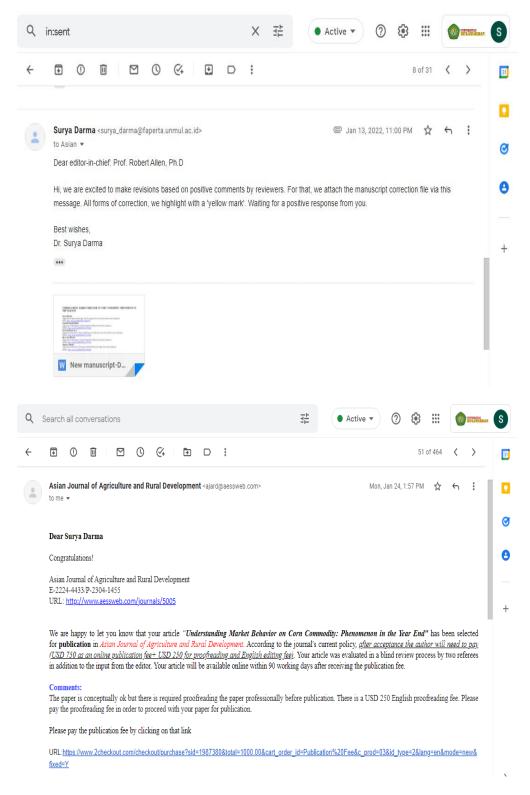
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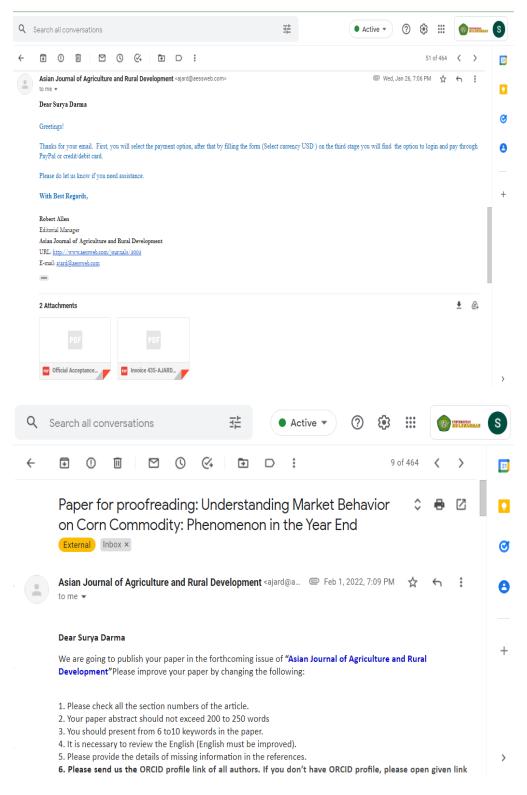
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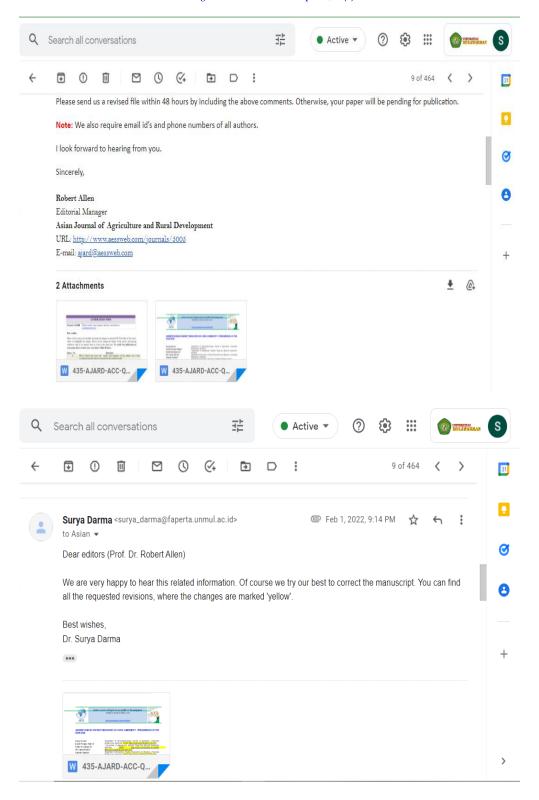
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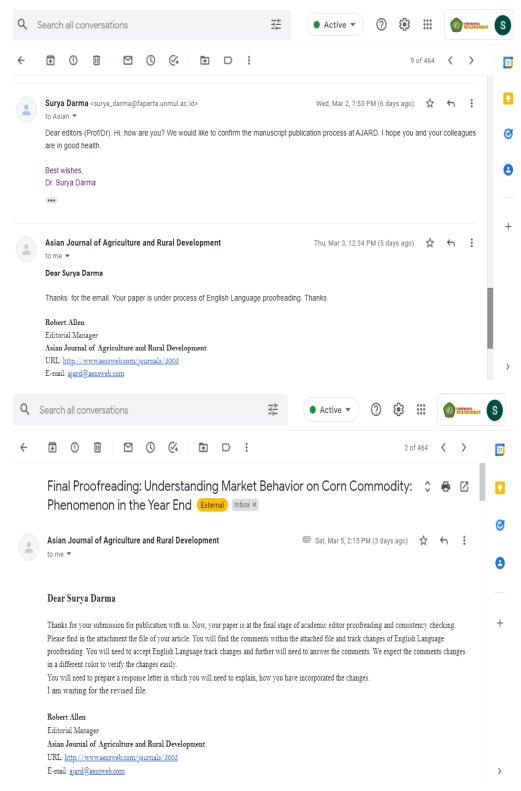


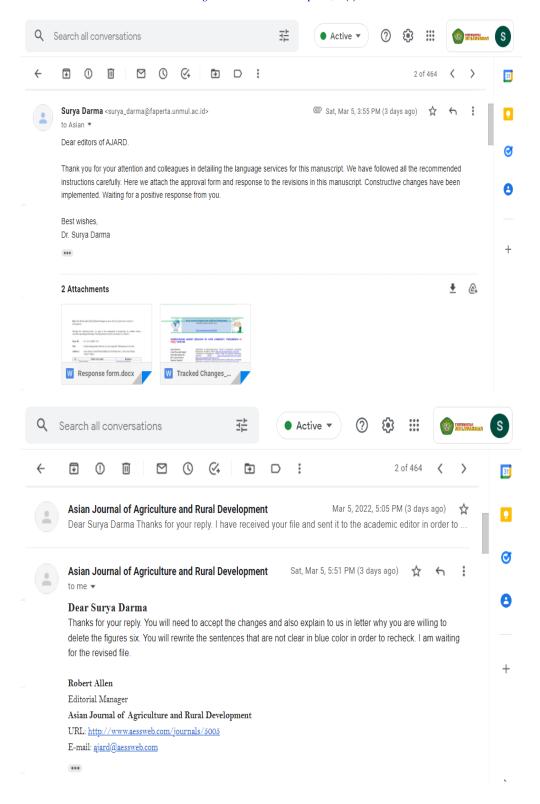


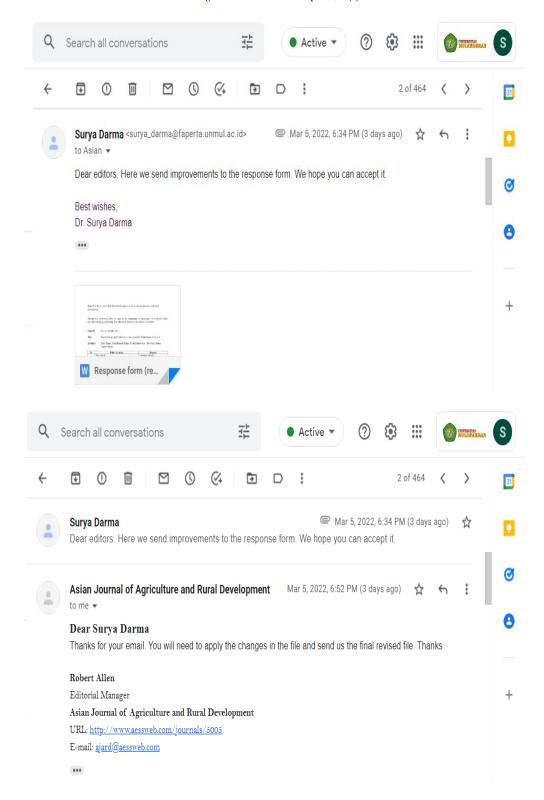


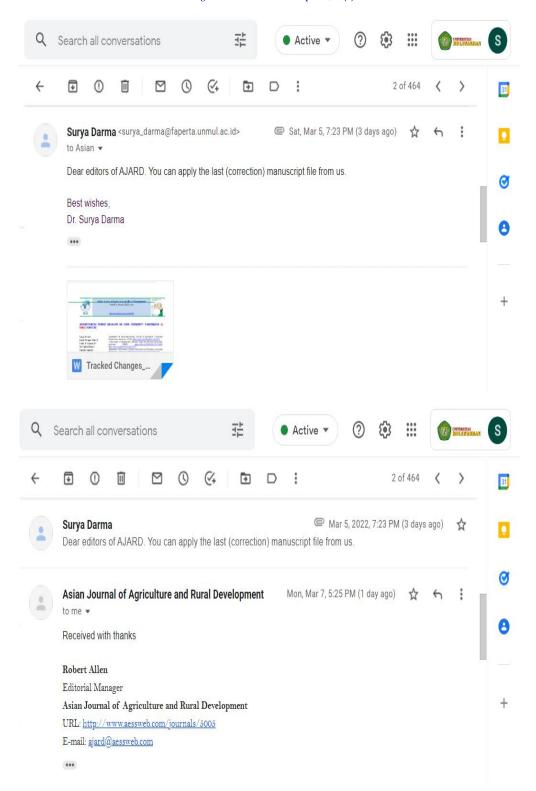


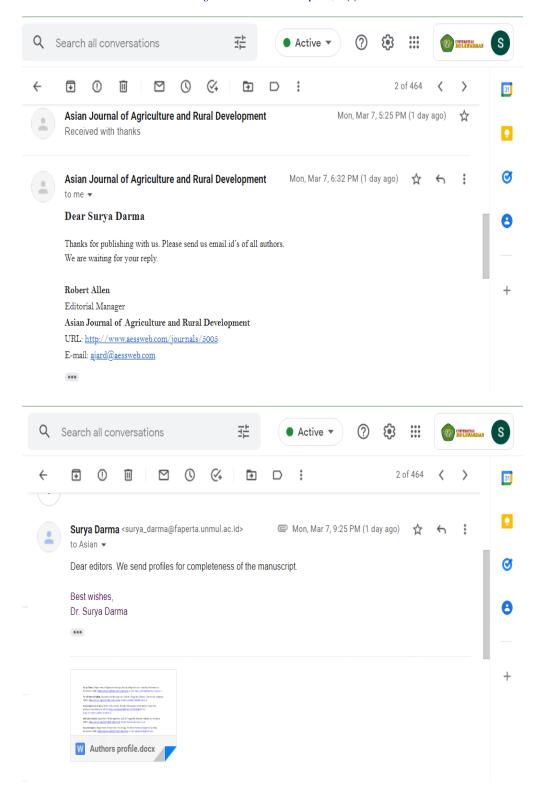


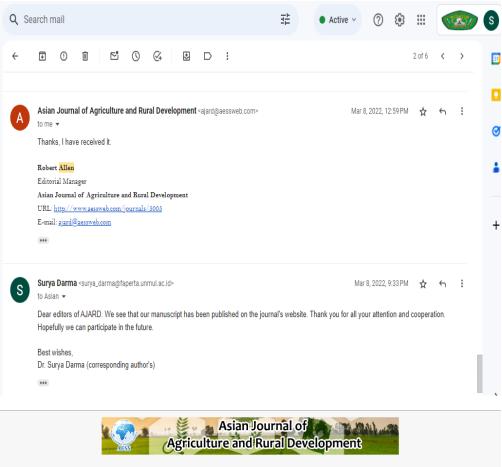














Vol. 12 No. 2 (2022)

# Understanding Market Behavior on Corn Commodity: Phenomenon at Year End

https://doi.org/10.55493/5005.v12i2.4434

Surya Darma<sup>+</sup> (b), Yundi Permadi Hakim<sup>+</sup> (b), Erwin Kurniawan A<sup>+</sup> (b), Dio Caisar Darma<sup>+</sup> (b), Suparjo Suparjo <sup>+</sup> (b)

## Abstract

The cause of market failure is the lack of synchronization between supply and demand, or vice versa. Initially, corn was considered as a substitute and a complementary commodity for food, but now it has turned into a basic need for people in Indonesia, especially when they celebrate the new year. The main aim of this study is to examine the interaction between the demand side and the supply side. The study was carried out by inviting 9,850 respondents in Samarinda City to be surveyed regarding interest,

#### Keywords

Demand, Supply, Corn, Interviews, Samarinda, End of year.

#### How to Cite

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Dear: Prof. Robert Allen, Ph.D (Editorial Manager in Asian Journal of Agriculture and Rural Development)

Through this verification letter, we agree to the examination of manuscripts by academic editors, especially regarding proofreading. The information for articles and authors is as follows:

**Paper ID** : No: 435/AJARD /2022

Title : Understanding market behavior on corn commodity: Phenomenon at year end

Author(s) : Surya Darma, Yundi Permadi Hakim, Erwin Kurniawan A., Dio Caisar Darma,

Suparjo Suparjo

No.	Points to be noted	Response
1	Title of article	Suggestion approved
2	Authors' name and affiliation	Clear
3	Abstract	Clear
4	Introduction	Clear
5	Theoretical lens	The last paragraph (13 <sup>th</sup> ) has been changed according to the editor's recommendation.
6	Methods	The 3 <sup>rd</sup> paragraph has been adjusted referring to the editor's comments.
7	Results and discussion	Figure 6 has been removed because it only shows one of the corn planting locations in Samarinda City, so it is not so important in the discussion section. The word 'value' in Tables 3 and 4 is changed to 'score'. The word 'they' in paragraph 13 <sup>th</sup> is ambiguous, so it has been corrected to 'corn farmers'. In the 17 <sup>th</sup> paragraph, the word 'they' is corrected to become 'farm household'.
8	Conclusion	Clear
9	Funding, competing interests, and acknowledgements	Clear
10	References	Clear

Responding to the point of minor changes referring to the comments of the editorial board, we have made a small correction with a 'yellow' mark. We and our colleagues appreciate all constructive recommendations in order to improve the quality of this manuscript. Waiting for a positive response from you.

March 5, 2022

Dr. Surya Darma
Corresponding authors



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## NOTIFICATION OF PAPER ACCEPTANCE

Date: 26-01-2022 Ref, No: 435/AJARD /2022

Surya Darma<sup>1</sup> ,Yundi Permadi Hakim<sup>2</sup>, Erwin Kurniawan A.<sup>3</sup>, Dio Caisar Darma<sup>4</sup>, Suparjo

Department of Agroecotechnology, Faculty of Agriculture, Universitas Mulawarman, Indonesia.

24Department of Management, Sekolah Tinggi Ilmu Ekonomi Samarinda, Indonesia.

We are pleased to inform you that your manuscript entitled "Understanding Market Behavior on Corn Commodity: Phenomenon in the Year End" has been accepted for publication in Asian Journal of Agriculture and Rural Development. Your paper was evaluated in a blind peer review process.

Remember to quote the manuscript number, AJARD/435/2022, whenever inquiring about your manuscript.

Thank you for choosing AJARD JOURNAL to publish your work. All the best.

Yours Sincerely,

Robert Allex

Robert Allen

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<sup>&</sup>lt;sup>3</sup>Department of Economics, Faculty of Economics and Business, Universitas Mulawarman, Indonesia. <sup>5</sup>Department of Geomatics Technology, Politeknik Pertanian Negeri Samarinda, Indonesia.