

Creative Economic Development Strategy Based on Processed Agriculture Product in Surabaya City

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Abstract—This research aims to analyze the implementation of policy strategies for developing creative businesses processed by food crops and fisheries. Through an increased production approach to take advantage of open market opportunities. The target respondent are by using respondents from the first-year research, the business development strategy is implemented through the increasing of the products. To analyze the difference in the number of products between before the application of the product increasing policy with after the implementation of the product increasing policy use the independent t- test. The results of this research showed that between before product increasing with the situation after the increasing of the product there was significant difference. That means the policy of developing creative businesses of processed agricultural products in the city of Surabaya with a strategy to increase the number of products can be applied.

Keywords—creative business; independent t-test

I. INTRODUCTION

The constraints and challenges of agricultural development implementation in Indonesia are more serious. In fact the increasing population growth requires the fulfillment of food needs but on the other hand, constraints are shown by the uncontrolled transfer of fertile land to meet boards and education needs, health and other public facilities .Excessive exploitation of natural resources is one of the triggers for the destruction of ecosystems that greatly affect to the level of land productivity. Various primary agricultural products, which have negative physical character and low-price transmissions because an increase primary agricultural products prices cannot be reached. The other side the Globalization must be respond and appreciate with conducive policies. The Asian Economic Community (MEA) is also a condition that needs to be considered wisely, precisely and quickly.

The city of Surabaya, as a metro city, does not permit the development of agricultural activities in farming. Indeed, the government of Surabaya City has implemented a policy to develop businesses that use the materials of primary agriculture as processed product to foster creative economic activity on the human resources of the city. The government of Surabaya is greatly focused on providing coaching for business actors whether food crops, livestock, or fisheries, prioritizing their creativity to have value added.

The government has made the blueprints of creative industries development for the period of 2009-2025 [1]. The blue print showed that in the future economic development must be based on creativity development. The effort of increasing the bargaining position of agricultural activities, and to provide added value of agricultural products. And the ability to compete can be interpreted as creative industries in agriculture.

The development of agriculture creative business process does not only have an impact on improving bargaining position of business actors, but overall it will also influence the economic improvement of a region. Therefore, it is necessary to examine development efforts with the implementation of the right strategy with product development approach in order to have a significant impact on regional economic development.

In the city of Surabaya, there are no plantations. The creative economy has been developed only to cover businesses processing crop, fishery, and livestock products. Thus, it is necessary to study in greater depth what creative efforts need to be developed because these will have a considerable impact on enhancing Surabaya's economy. It is also necessary to analyze what strategies are effective and efficient in developing them.

As a manifestation of the focus of the city of Surabaya on developing a creative industry that processes primary agricultural products, it has established a non-formal institution called the "Economic Hero" (Pejuang Ekonomi) to accommodate the community of creative business actors. This provides technical assistance in production, marketing, and the provision of business information, as well as facilities to support the development of creative businesses in Surabaya. Thus, many creative entrepreneurs have emerged, currently operating both on a national scale and in the form of a home industry that is not yet stable.

A. Problem Formulation

The problems in this research can be formulated as follows:

- What is the implementation of the Strength - Opportunity strategy in developing creative businesses processed by food crops and fisheries in the City of Surabaya.

- Is there a significant difference between the numbers of products before the application of the product increasing policy with the number of products after the implementation of the product increasing policy.

B. Research Purpose

The purpose of the research is to analyze the policy strategies implementation of developing creative businesses processed by food crops and fisheries, through an increased production approach to take advantage of open market opportunities.

II. RESEARCH METHODS

A. Study Context

This research was located purposively in the city of Surabaya, Indonesia, with the consideration that Surabaya is an industrial and trading city with good economic growth, and increasing population growth. In other side many creative businesses processed by food crops and fisheries have developed. This has triggered the emergence of businesses based on creativity of the actors to gain added value and increase the ability to compete.

B. Study Sample

The target respondents were the actors of the creative business processed by food crops and fisheries. Which is in the first-year research was in the prime classification and has basic status, consist of 8 respondents are the actors of the creative business processed by food crops and 5 respondents are the actors of the creative business processed by fisheries. It is assumed that the number of respondents has been representative describing the condition of the creative business processed by food crops and fisheries. As a whole in the city of Surabaya.

C. Data Collection

In this research both of primary and secondary data were collected. The Delphi technique was used to retrieve data [2]. Primary data were collected through interviews directly to the respondents using a questionnaire prepared beforehand and the secondary data were collected from the Central Bureau of Statistics, the Office of Food Security and Agriculture of Surabaya City, and the Office of Cooperatives, Usaha Mikro Kecil dan Menengah (UMKM), etc.

D. Data Analysis

To make sure the accuracy of the data used, normality tests and heteroscedasticity tests with scatterplot graphs were carried out by SPSS software. Normality Test is a test conducted in order to assess the distribution of data in a data group or variable, whether the data is normally distributed or not. One of the most potential strength indicators is their have sufficient capital, and one opportunity indicator was chosen namely an indicator of market opportunities. Both of that indicators had great potential for the creative business of processed agricultural products development. With sufficient capital and open market opportunities, the development of processed

creative business of agricultural products is carried out with the increasing of the products number. Difference between the numbers of products before the application of the product increasing policy with the number of products after the implementation of the product increasing policy used to see the effectiveness of the policies application for developing creative business processed by agricultural products. To analyze the difference in the number of products between before and after the increasing product the independent t- test. (SPSS software) used.

III. RESULTS AND DISCUSSION

A. Normality Test

The result of normality test was shown in table below:

TABLE I. TESTS OF NORMALITY

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Before	,292	3	.	,923	3	,463
After	,232	3	.	,980	3	,728

From the table above it can be seen that the data before increasing the product and after the policy of increasing product implemented are normally distributed. As seen on the side of Shapiro-Wilk (because respondents are less than 50 people) it seems that the significance is greater than 0.1 (10 %). So that this research data can be used to carry out further analysis.

B. Heteroscedasticity Test

Heteroscedasticity test in this research is shown through SPSS output in the form of scatterplot graph as shown in Figure 1 and 2 below:

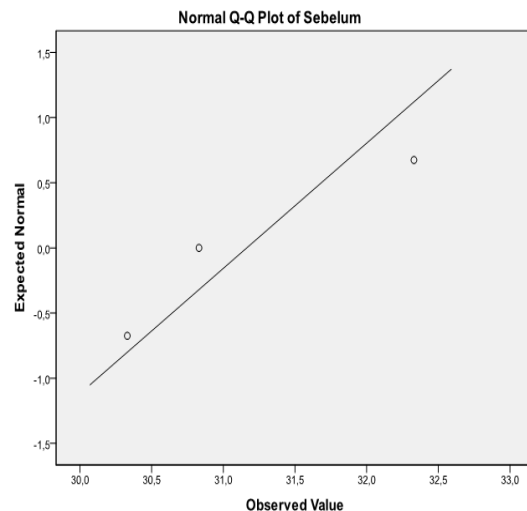


Fig. 1. Scatter plot data of the creative business processed before increasing product.

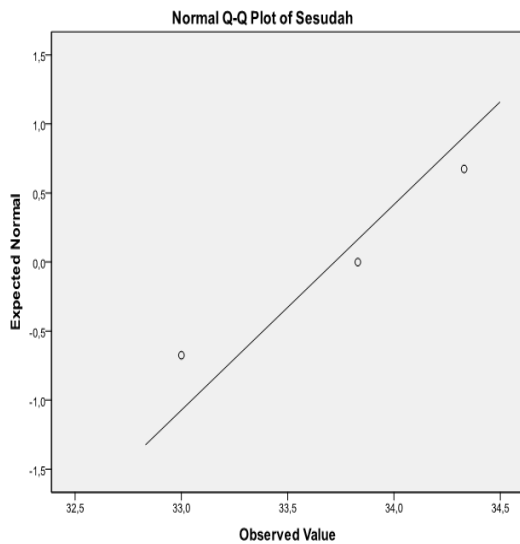


Fig. 2. Scatter plot data of the creative business processed after increasing product.

From the two images above, there are no specific patterns shown by the plots. So that it can be concluded that the research data does not occur Heteroscedasticity.

C. Production Analysis

The number product increasing is a policy implementation that is applied to develop agriculture business creative in the Surabaya city. Analysis of the production of creative businesses processed by food crops and fisheries is described as follows

D. Creative Business Processed Food Crop Production

The data of processed food crops creative business before increasing the product since November 2017 to March 2018 can be seen on the table below [3]:

TABLE II. THE AVERAGE PRODUCTION OF PROCESSED FOOD CROPS CREATIVE BUSINESS BEFORE INCREASING THE PRODUCT SINCE NOVEMBER 2017 TO MARCH 2018 IN SURABAYA

No. Resp	Before increasing the Product (Unit)					Average/ Month
	Nov	Des	Jan	Feb	March	
1	7.500	7.500	7.500	7.500	8.000	7.600
2	1.000	1.000	1.000	1.000	1.000	1.000
3	320	350	350	350	350	344
4	2.500	2.550	2.550	2.500	2.500	2.500
5	2.008	2.010	2.010	2.020	2.020	2.013,6
6	91,25	100	100	100	100	98,25
7	157,5	167,5	167,5	167,5	167,5	165,5
8	220	250	250	250	250	244
Total	13.796,75	13.927,5	13.927,5	13.887,5	14.387,5	
Average	1.724,59	1.740,93	1.740,93	1.735,94	1.798,44	1.748,17

From table 2 it can be seen that from November 2017 to March 2018 each processed food crops creative business product did not significantly increase. The constant amount of production for 5 months is partly due to the actor of processed

food crops creative business not daring speculate to increase the number of products due to lack of safeguards against access to market expansion and lack of not control production management.

After receiving counseling and mentoring, the actors of Creative business processed by food crops realize the importance of increasing products to develop their business. The magnitude of the products increasing of creative businesses processed by food crops can be seen in the following table.

TABLE III. THE AVERAGE OF PROCESSED FOOD CROPS CREATIVE BUSINESS AFTER INCREASING THE PRODUCT SINCE APRIL TO MARCH 2018 IN SURABAYA

No. Resp	After Increasing Production					Average/ Month
	April	May	June	July	August	
1	8.750,00	8.750,00	9.500,00	11.750,00	12.750,00	10.300,00
2	1.500,00	1.500,00	1.750,00	1.750,00	1.750,00	1.650,00
3	380,00	380,00	400,00	450,00	475,00	417,00
4	3.250,00	3.250,00	3.500,00	3.500,00	4.000,00	3.500,00
5	2.805,00	2.805,00	2.950,00	3.750,00	3.950,00	3.252,00
6	100,00	100,00	142,50	150,00	162,00	130,90
7	175,00	176,00	176,25	180,00	188,50	179,15
8	300,00	325,00	325,00	350,00	350,00	330,00
Total	17.260,00	17.286,00	18.743,75	21.880,00	23.625,50	
Average	2.157,5	2.160,75	2.342,96	2.735,00	2.953,19	2.469,87

Table showed that since April 2018 the number of product creative businesses processed by food crops have increased 29.22%. The average percentage production increase after counseling, technical assistance and production management assistance can be seen in the following table:

TABLE IV. THE AVERAGE PERCENTAGE OF PROCESSED FOOD CROPS CREATIVE BUSINESS INCREASE IN SURABAYA CITY

Name of Food Crops Creative Business	The Average Percentage Increase (%)
Sari kedelai Murni	8,70
Tempe Sehat	2,05
Olahan Semanggi	5,34
Keripik Tempe Idola	4,91
Lapis Kukus Pak De bu De	15,65
Ayu Cookies	10,55
Herbal Kendi Jati	2,03
Sami Jali	3,46
Average	6,59

From the table above it can be seen that increasing lapis Kukus Pakde Bude production is the highest. Because it can be used in a lot of event, such as weddings, birthdays, meetings, salvation etc. So that the market share is wider.

E. Production of creative business processed by fisheries

TABLE V. AVERAGE PRODUCTION OF CREATIVE BUSINESS PROCESSED BY FISHERIES BEFORE PRODUCTION INCREASES IN SURABAYA CITY NOVEMBER 2017–MARCH 2018. IN THE CITY OF SURABAYA

No. Resp	Before Production Increases					Average / month
	Nov	Dec	Jan	Feb	March	
1	190,00	190,00	190,00	190,00	190,00	190,00
2	35,00	35,00	36,75	36,75	37,00	36,10
3	8,00	8,00	8,12	8,12	8,12	8,07
4	150,00	150,00	150,00	150,00	155,00	151,00
5	65,00	65,00	66,50	66,50	66,50	65,9
Average	107,52	107,52	108,93	108,93	110,81	90,21

From the table it can be seen that the average product per month is stable. This is partly due to the fact that creative fisheries actors do not realize that the market is still open.

TABLE VI. THE AVERAGE OF PROCESSED FISHERIES CREATIVE BUSINESS AFTER INCREASING THE PRODUCT SINCE APRIL TO MARCH 2018 IN SURABAYA

No	After increasing the product					Average/ Month
	April	May	June	July	August	
1	220,00	250,00	275,00	300,00	350,00	279,00
2	40,25	40,50	45,75	46,00	46,75	43,85
3	8,25	10,25	15,35	17,25	25,125	15,25
4	168,75	237,50	257,50	281,25	281,50	245,30
5	87,5	91,80	93,75	95,75	97,37	93,23
Average	104,95	126,01	137,47	148,05	160,15	135,33

Table 6 shows that the average product per month has increased significantly after implementation the policy increasing product. The average percentage production increase after counseling, technical assistance and production management assistance can be seen in the following table:

TABLE VII. THE AVERAGE PERCENTAGE OF PROCESSED FISHERIES CREATIVE BUSINESS INCREASE IN SURABAYA CITY

Name of Fisheries Creative business	The average percentage increase (%)
Gaul Mina Rahayu	10,91

TABLE VIII. PAIRED SAMPLES TEST

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Production 1 Production 2	-721,71400	336,64261	150,55115	-1139,71100	-303,71700	-4,794	4	.009

From the above table it can be seen that the production of creative businesses processed by food crops shows a significant difference between before and after the implementation of the product increase policy. Because the significant value 0.009 (9%) less than the alpha value (10%). It means that producers of creative businesses processed by food crops realize the need developing their businesses with production increasing.

TABLE IX. PAIRED SAMPLES TEST

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Production 1 Production 2	-26,58600	19,96708	8,92955	-51,37840	-1,79360	-2,977	4	.041

IV. SUMMARY AND RECOMMENDATIONS

A. Summary

There is a significant difference between production before the implementation of a policy of increasing product with after the policy implementation to increase the number of products creative businesses processed by food crops and fisheries. The

Table 7. Cont.

Name of Fisheries Creative business	The average percentage increase (%)
Payus makmur	0,83
Olahan Ikan asin	23,76
Olahan Kerang Bunda	11,31
Prima Krispy Teripang	2,63
Average	9,89

It appears that salted fish processing has the highest percentage increase. Because this product is favored by many people in the lower, middle and upper classes. And another reason the salted fish can be stored for a long time, so that producers are not worried about increasing the number of products. Many kinds of the salted fish were produced such as ikan asin Bulu Ayam, Bulu Mentok, Udang rebon, Teri kecil, Bulu jenggot, Teri nasi and jambal Roti.

When compared the average increase in production between processed food crops (6.59%) and processed fisheries (9.89%), it can be seen that the processed fishery products are greater. because that processed fishery products can be stored for a long time, so that producers and consumers are not worried about storing for a long time.

F. Analysis the Independent T- test

The results of the T- test analysis the production of processed food crops creative business can be seen in the following figure:

The following table shows the results of the T- test analysis the production of processed Fisheries creative business. The results of the analysis show that the significant value 0.041 (4 %) less than the alpha value (10%). It means that producers of creative businesses processed by Fisheries also realize the need developing their businesses with production increasing, as in the creative business processed by food crops.

increase in processed fisheries production is higher than the production of processed food crops. Strategy for developing agricultural produce creative business in Surabaya city with the product number increasing can be applied.

B. Recommendation

Surabaya city government should increase the assistance to the processed creative business entrepreneurs of agricultural products, with motivation and facilitating market expansion so that the entrepreneur's awareness and courage to increase production can be improved. Simplification of administrative procedures is necessary, making it easier to monitor their development and address problems encountered. Further research is suggested to find out the level of profitable product optimization

REFERENCES

- [1] Badan Pusat Statistik, Surabaya Dalam Angka 2015. Badan Pusat Statistik Kota Surabaya, 2015.
- [2] T. Burandt, K. Löffler and K. Hainsch, GENeSYS-MOD v2. 0- Enhancing the Global Energy System Model: Model improvements, framework changes, and European data set (No. 94). DIW Data Documentation, 2018.
- [3] Badan Pusat Statistik Jawa Timur, Produk Domestik Regional Bruto (PDRB) Kabupaten/Kota Menurut Lapangan Usaha 2010-2014 Surabaya, 2015.