
THE ROLE OF CORN WASTE PRODUCT INNOVATION ON THE SOCIETY ECONOMIC GROWTH (Case Study on MSMEs Corn Husk In Ketawang Village)

Irfana Atsil

Faculty of Economics, UIN Maulana Malik Ibrahim
Malang, East Java, Indonesia

Dwi rachmawati

Faculty of Economics, UIN Maulana Malik Ibrahim
Malang, East Java, Indonesia

Unsa Farrichatun Aliya

Faculty of Economics, UIN Maulana Malik Ibrahim
Malang, East Java, Indonesia
Email: unsafarricha@gmail.com

ABSTRACT

This research aims to find out the influence of corn waste product innovation on economic growth of society. This research using mixed methods to test the hypothesis with quantitative methods and supported by qualitative method. The results from qualitative research shows that innovation is indeed affected the economic growth of society as revealed interview from trusted expert. The results of quantitative research stated that innovation variables (X) have a positive effect on economic growth (Y), with total influence of 91.1 %. This means higher innovation and will affect on economic growth of society.

Keywords: Innovation, Economic growth, Mixed Method, MSMEs, Corn Husk Waste.

| Received November 2017 | Accepted December 2017 | Available online December 2017 |

| DOI: <http://dx.doi.org/10.18860/mec-j.v1i1.4530>

INTRODUCTION

Indonesia is an agricultural country where the agricultural sector is chosen chosen by people to meet the life needs. Agriculture also becomes the backbone of Indonesian economy. The challenges faced by farmers not only harvest failure, but also the difficult to sell their agricultural products. Farmers feel confusion when the agricultural harvest abundance but they cannot sell it, as a result the products is sold with very low prices even though it is not give much revenue. The lack of knowledges also become factors to support it.

One leading products of Indonesian agriculture sector is corn. Indonesia is the largest corn exporter country because Indonesia is one of thirteen tropical countries that suitable with agriculture of corn. From here is the Indonesian people choose corn for agriculture, corn became the second choice after the rice plant, corn can also be used as a source of human food (corn chips, popcorn, grilled corn, sweet corn), rumansia feed and also maisena flour.

Market demand for corn is high, but corn prices remain cheaper. It needs creativity to processing the corn to become more valuable and high selling start from cob, husk, stem or root of corn. Farmers can utilize them and will not suffer any losses again, if agriculture experienced a rapid progress and economic growth will also increase.

The creativity comes from a new at Ketawang village Gondanglegi. The farmers built Micro, Small, and Medium Enterprises (MSMEs) Corn waste and employ the local people. The farmers utilize corn waste (corn husk) not only as cattle feed. The price is cheap, only

ten thousand rupiah per girdles but it can be turn into brooch, a flower , and souvenirs with higher selling price.

MSMEs become one alternative new job and also plays a role in encouraging economic growth. MSMEs take advantage of various Natural Resources which had the potential to a region that has not been processed commercially. This contributed to large regional income and income of Indonesian state.

Islam itself has been mentioned in Al-Quran at al-Baqara Verse 30 below.

بِحَمْدِكَ تُسَبِّحُ حُنُودَ الدِّمَاءِ وَيَسْفُكُ فِيهَا يُفْسِدُ مَنْ فِيهَا أَتَجْعَلُ قَالُوا ۗ خَلِيفَةَ الْأَرْضِ فِي جَائِلٍ إِنِّي لِلْمَلَائِكَةِ رَبُّكَ قَالَ وَإِذْ تَعْلَمُونَ لَا مَا أَعْلَمُ إِنِّي قَال ۗ لَكَ وَتُقَدِّسُ

We must be sincere in maintaining this earth, one way is to manage the earth with best. We manage agricultural waste in a better way and become jobs for others one.

LITERATURE REVIEW

Schumpeter Theory

Schumpeter said that idea or the discovery that produced from human creativity or innovation will have an impact on productivity when translated into innovation in production process and in real economic activities. Here Schumpeter underscoring the central role of one group of human beings, namely entrepreneurship or entrepreneurs in transforming ideas become reality, namely increased productivity.

Schumpeter emphasizes one important process again that must occur when the increased productivity is cool to spread to all parts of economics. Those process he called creative destruction, which essentially is a company that has adopted the innovation and productivity increase must allowed to replace or even victim support costs incurred the company production stops. The old Company long allowed to grounded and be replaced by new company which more productive. This process happened only when the competition between the company and allowed. The Policy protects the company that is no longer able to compete will impede the process of creative destruction and on their turn will impede the improvement of productivity of rest of economy, the process of natural selection ala darwin must be running.

Schumpeter theory complement the theory of competitiveness list. So not only investment in fields of education and health and also investment in production facilities and infrastructure must be prioritized, but also must be equipped with with special program for policy and promote the entrepreneurial groups that can interpret the ideas or the discovery of a real practice in process of production. The policy in field of business competition that supports the process of creative destruction must be done consistently.

The theory of competitiveness list-Schumpeter is formulated in period prior to globalisation as advanced continuously. The experience of several decades last expectation is providing important lessons for all countries in world. The lesson is that in era of globalisation an economy could collapse because it does not hold against the impact of economic crisis and financial from time to time hit the world economy. The crisis can destroy the competitiveness of nations. Productive capabilities development can be a retreat because of impact of crisis. The key here is how to build the defense system to crisis.

MSMEs

Law Number 20 Year 2008 about Micro Small and Medium Enterprises (MSMEs) stated

1. Micro Business is productive business of individuals and/or body of individual businesses that meet the criteria of micro business as set forth in this law. Micro Business criteria as follows:
 - a. Have a net wealth most IDR 50,000,000.00 (seventy-five million rupiah) not including land and building the place of business; or
 - b. Have the results of annual sales at most IDR 300,000,000.00 (three hundred million Rupiah)
2. Small business is a business productive economy that stands on its own is done by an individual or entity that is not a subsidiary company or not branches of company who pointed out, controlled, or become part either directly or indirectly from medium business or big business that meet the criteria for small businesses as follows:
 - a. Have a wealth of clean more than IDR 50,000,000.00 (seventy-five million rupiah) to with most IDR 300,000,000.00 (three hundred million rupiah) not including land and building the place of business; or
 - b. Have the results of annual sales of more than IDR 300,000,000.00 (three hundred million rupiah) to with most IDR 2,500,000.00 (two billion five hundred rupiah)
3. Medium Businesses are productive economic business that stand alone, conducted by an individual business entities that is not a subsidiary or branch of company which owned, controlled, or part either directly or indirectly with small business or big business with amount of wealth or net annual sales results as set forth in this law. The criteria of Medium Businesses is as follows:
 - a. Have a wealth of clean more than IDR 500,000,000.00 (five hundred million rupiah) to with most IDR 10,000,000.00 (ten billion rupiah not including land and building the place of business; or
 - b. Have the results of annual sales of more than IDR. 2,500,000,000.00 (two billion five hundred million rupiah) to with most IDR 50,000,000,000.00 (fifty billion rupiah).

The Central Statistics Agency (BPS) provides restrictions on definition of SMBS based on quantity of labor, namely to micro business has total labor 1 to 4 people, small businesses have total labor 5 to 19 people, while medium businesses have human labor 20 to 99 people.

Bank Indonesia provides limitations of Micro, Small and medium-sized businesses as follows:

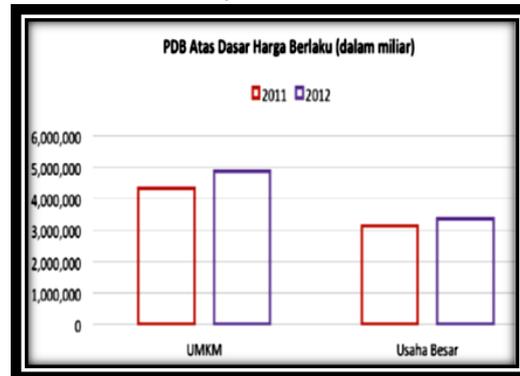
1. Micro Business. (SK. BI Director No.31/24/Kep/DER 5 May 1998). The business run by people of poor or near poor. Owned by family of local resources and simple technology. The field of business is easy to exit and entry.
2. Medium Businesses (SK Director of BI No. 30/45/DIR/UK date of 5 Jan 1997). Annual Turnover <3 billion in assets= IDR 5 billion for industry sector Asset= IDR 600 million outside of land and building for sector is not the manufacturing industry.

The World Bank also gives understanding about Small and Medium Businesses, namely:

1. Small business is a business that has the workers less than 30 people, incomes a year less than 3 million US dollars, and with total assets of less than 3 million US dollars.

2. Medium business is a business that has the workers less than 300 people, incomes a year less than 15 million US dollars, and with number of assets until some 15 million US dollars.

Figure 1. The development of MSMEs Data and big business
The year 2011-2012



Source: Ministry of cooperatives and MSMEs, 2014

The graph above explain the contribution of MSMEs against gross domestic product (GDP) Top Price valid and constant Prices 2000. The GDP is the amount of added value that is produced by the entire business units in a particular country, or is the number of the value of the final goods and services produced by the entire economic unit. The contribution of MSMEs to national PDB according to price valid on 2011 Rp4.321.8 trillion or 58,05%, while 2012 Rp4.869.5 trillion or 59,08%.

The Total contribution of MSMES to national PDB is the accumulated from all sectors of the economy MSMES. The classification of types of economic activities follow the concept of ISIC (International Standard Classification of All Economic Activities) a revised 1968. The classification of this sector aims to facilitate comparison of the level of economic activity between the various activities.

METHODS

Research Design

This research uses a mixed method (Mixed Method), in this research also uses qualitative research, qualitative research is expected to get all the information that qualitative research. In addition in each subject the subject, will be seen to conflict dynamics and Changes, order, relationship, as well as the definition of groups and individuals who are being developed and will be seen the existence of tendencies, think pattern, disorder, and behavior at view the subject in research the role of Corn Waste Product Innovation to economic growth in community, quantitative research method used to support qualitative research method that his nature is still subjective so that results of research more accurate.

Quantitative research is the systematic scientific research of parts and phenomenon and relationship of its relationship. The purpose of quantitative research is to develop and use mathematical models, theories and/or the hypothesis that related with natural phenomenon. The process of measurement is a central part in quantitative research because it gives the fundamental relationship between the empirical observation of method used is a simple regression quantitative method.

In this case the researcher using the sources of primary and secondary data.

1. The primary data obtained from field based on original source, with interview on manufacturer (owner of MSMEs), supplier (Farmers) and workers (Community around) about new product innovation variable with how to interview against the production of MSMEs and interview to citizen.
2. Secondary data obtained from Central Statistics Agency about population revenue as measured by GDP Counties Malang on basis of price implemented in 2011-2015 with income data MSMEs year 2011-2015.

Operational definitions of variables

In this study researchers using the variables namely innovation MSMEs corn waste, on economic growth of community as a flight variable. that will be tested by using a simple regression test.

X: innovation (independent)

Y: economic growth (dependent service).

Data Collection

The data is collected by Interview, Observation, Documentation.

Data Analysis

Data is analyzed by dependent sample t test techniques to test the differences *murabahah* before and after the implementation. Because of this research data is sort, the normality test has to be done in order to guide the selection of hypothesis testing that will be used. The analysis tools used in this research namely; SPSS 16 using the formula:

$$Y: a+\beta x$$

This techniques used for data processing after obtaining information data about income before there MSMEs Corn waste and income data population after no MSMEs Corn waste from office of local BPS. (*Test simple regression test, Classical Assumptions, hypothesis test*).

DISCUSSION

The Discussion (Qualitative Research)

Following instruments needed researchers in obtaining research data:

1. The determination of subject of research to determine the subject of research researchers choose based on subjects that have nothing to do with title of research by interviewing the subject of research.
2. Supporting Data research, this data used to support the data that has been obtained from results of interview, to obtain supporting data, researchers requesting data in BPS Kepanjen in library and directly consult with employees of BPS.
3. Income Analysis

The owner of MSMEs

The interpretation:

Based on results of interview to owner can be interpreted that MSMEs corn Waste "Azizah Florist" already started from start 1998, until now survive the business due to this MSMEs benefit, monthly turnover was IDR 50 million and having 60 housewife who need the work by providing free training. The problems are difficulties to get raw materials in

recent because many plant sweet corn, but it still can be solved. Even MSMEs has been exporting its products. The owner is very pleased with this business. It does not require a difficult because their product is a unique product that attracts everyone even foreign tourists.

MSMEs Employees (fixed)

Mrs. Romlah address Penjalinan Gondanglegi, as employees of MSMEs Corn Husk give opinion about the questions that given by researchers.

MSMEs Employees (fixed)

Mrs. Sholihah at Karangasem Gondanglegi become employees of MSMEs Corn Husk. She give opinion about the questions given by researchers.

The interpretation:

Based on results of interview above can be interpreted that MSMEs corn waste "Azizah Florist" help the economy his employees the day they if diligent can produce money 300 thousand rupiah, employees in Azizah Florist does not feel pressured to work even make happy because make handicrafts interest is preferred by women and it is not difficult to make. Working in "Azizah Florist" is not bound by time as we are able to and can be done at home while relax and take care of family so that obligation as a woman is not left it was because their husbands supporting them and participate even help in production process.

The supplier of MSMEs (Fixed)

Mr Abdullah from Putat Kidul Gondanglegi become a supplier of MSMEs Corn Husk. He give opinion about the questions given by researchers.

The supplier of MSMEs (Agreements)

Mrs. Tinik from Ketawang Gondanglegi becomes a supplier of MSMEs Corn Husk. She give opinion about the questions given by researchers.

The interpretation:

Based on interview above, it can be interpreted that MSMEs of corn waste "Azizah Florist" help farmers and farm worker around the village area and Gondanglegi Ketawang and other districts. MSMEs is helping farmers and farm worker because usually corn husk is removed. "Azizah Florist" makes innovation to help farmers to make product from corn waste. if a problem occurs on outcome of season corn, it can be covered with corn husk selling. Farm worker who only get the wages for harvesting corn also get more money from corn husk selling.

The Data Tested

The Year	Msmes income Data	Gdp data according to the price valid
2011	620,000,000	48,200,000,000
2012	650,000,000	53,970,000,000
2013	650,000,000	60,340,000,000
2014	680,000,000	64,310,000,000
2015	690,000,000	71,720,000,000

(Source: Azizah Florist, BPS kepanjen)

The results of test data regression SPSS simple linier.

Description: explained about the variables included and method used in regression linier.

The Discussion (Quantitative)

Simple Linier Regression Equation

Generally simple linier regression equations is $Y = a + bX$. While to know the value of regression coefficient we can be modeled on from table:

A= numbers constant from unstandardized greatly enhanced. In this case the value of 4.843E8. This figure is a constant number that has the meaning that if there is no innovation (X) then the value of economic growth (Y) was 4.843E8.

B= numbers, regression coefficient value of C, numbers this means that every addition of 1 percent of level of innovation (X), then economic growth (Y) will increase by 0.003.

Because the value of positive value regression coefficient (+), then it can be said that innovation (X) have a positive effect on economic growth (Y), so that equation is $Y = 4.843 \text{regresinya } E8 + 0.003X$.

Coefficients ^a					
	Unstandardized Coefficients		Standardized Coefficients		
The Model	B	Std. Error	Beta	T	Sig.
1 (Constant)	4.843E8	3.174E7		15.258	.001
Economic_Growth	.003	.001	.954	5.525	.012

A. Dependent Variables: Innovation

Hypothesis test in multiple regression analysis simple linier

Hypothesis test or test the influence of function to know whether the regression coefficient is significant or not, the hypothesis in this simple linear regression analysis is:

Ho = no influence of innovation (X) against economic growth (Y)

Ha = no influence of innovation (X) against economic growth (Y)

To verify whether the regression coefficient is significant or not (in meaning of x variables affect the variables y) can perform this hypothesis test with how to compare the value of significance (SIG) with probability 0.05 or with another way of comparing the value of t count with t table.

Hypothesis test compares the value of Sig. with 0.05

Now that becomes the basis for decision in regression analysis to see the value of significance (SIG) SPSS output results are:

1. If the value of significance (SIG) < from probability 0.05 means that there is the influence of innovation (X) against economic growth (Y).
2. On contrary, if the value of significance (SIG) > from probability 0.05 means that there is no influence of innovation (X) against economic growth (Y).

Coefficientsa

		Unstandardized Coefficients		Standardized Coefficients		
The Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	4.843E8	3.174E7		15.258	.001
	Economic_Growth	.003	.001	.954	5.525	.012

A. Dependent Variables: Innovation

Based on above output dikethui significance value (SIG) of contributed $0.012 < 0.05$, so that it can be disimpulkan that H_0 rejected and H_a accepted, which means that "there is the influence of innovation (X) against economic growth (Y).

Hypothesis test compares the value of t count with value of t Table

This hypothesis is often called also with test t, where pengmbilan base the decision in test t is:

1. If the value of t count $>$ from table so there is the influence of innovation (X) on performance of officer (Y)
2. On contrary, if the value of t count $<$ from t the Table so there is no influence of innovation (X) against economic growth (Y)

Based on above output known the value of t count of 5.525, because the value of t count is found, then the next step we will find the value of t table, now the formula in search for t table is:

The value of $\alpha/2 = 0,05/2 = 0,025$

The degree of freedom (Indonesia Recorded Its 94) = $n-2$ ($5-2 = 3$)

The value of 0,025, 3 to distribution of value of t table then we see t Table of 3,182

Because the value of t count of $5.525 > 3,182$ so that it can be concluded that H_0 rejected and H_a accepted, which means that "there is the influence of innovation (X) against economic growth (Y).

Hypothesis Test Regression Curve

Testing using the regression curve would be useful if the value of t count found positive.

Coefficientsa

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
The Model					
1 (Constant)	4.843E8	3.174E7		15.258	.001
Economic_Growth	.003	.001	.954	5.525	.012

A. Dependent Variables: Innovation

Based on curve above it is known that value of t count of 5.525 lies in an area of positive influence, so it can be concluded that "there is a positive influence innovation (X) against economic growth (Y).

See the greatness of variables X against Y

To know the greatness of influence of innovation (X) against economic growth (Y) in multiple regression analysis simple linier, can be modeled on value of R square or R2 located on output spss model section Summary.

The Model Summary				
The Model	R	R Square	R Square	Std. The error of Estimate
1	.954a	.911	.881	9.58548E6
A. Predictors: (Constant), economic growth				

From above output known the value of R Square of 0,911 this value means that influence of innovation (X) against economic growth (Y) was 91.1%, while 8,9 % economic growth is influenced by other variables is not examined.

CONCLUSION

Based on interviews with owner, employees and suppliers of raw materials for MSMEs, it can be concluded that innovation has an important role to improve the economics of society because they can help public income related with MSMEs.

Test result of SPSS regression has positive coefficient value (+). It can be said that innovation (X) have a positive effect on economic growth (Y). The regression equation is $Y = 4.843E8 + 0.003X$. It can be concluded that innovation (X) have a positive effect on economic growth (Y) with total influence of 91.1 %. This means that higher innovation will influence to improve the economic growth.

Research limitation as follow:

1. This research took the data from BPS. The data is still not contain water procurement and waste water treatment. We only need GDP data for waste processing, so that data is not perfect.
2. The selected speakers are still limited due to difficult found respondent.

Future researcher can add other independent variables to know what factors to influence the economic growth.

REFERENCES

- Andi, Hamzah. 2007. Analisa Kinerja Keuangan Terhadap Pertumbuhan Ekonomi, Pengangguran, dan Kemiskinan: Pendekatan Analisis Jalur (Studi Pada 29 Kabupaten Dan 9 Kota Di Provinsi Jawa Timur Periode 2001-2006). *Jurnal ekonomi*. Google Scholar (diakses tanggal).
- Bashit, Abdul. 2012. *Ekonomi Kemasyarakatan*. Malang; UIN-MALIKI PRESS.
- Badan Pusat Statistik. 2016. *Data Pendapatan Penduduk*. Malang; Perpustakaan Badan Pusat Statisika.
- Etika Ari Susanti, Imam Hanafi, dan Romula Adiono (2013) Pengembangan Ekonomi Lokal Dalam Sektor Pertanian (Studi pada Kecamatan Pagelaran Kabupaten Malang). *Jurnal ekonomi*. Google Scholar (diakses tanggal).
- Feni Dwi Anggraeni, Imam Hardjanto, dab Ainul Hidayat. 2013. Pengembangan Usaha Mikro, kecil, dan Menengah (UMKM) Melalui Fasilitas Pihak Eksternal Dan Potensi Internal(Studi Kasus Pada Kelompok Usaha “Emping Jagung” di Kelurahan Pandanwangi Kecamatan Blimbing, Kota Malang). *Jurnal Ekonomi*. Google Scholar (diakses tanggal).
- Ghalib, Agfa Polnaya. 2015. Strategi Pengembangan Ekonomi Lokal, Untuk Meningkatkan Daya Saing Pada UKM Ekonomi Kreatif Batik Bakaran Di Pati, Jawa Tengah. *Jurnal ekonomi*. Google Scholar (diakses tanggal).
- Ghozali. 2013. Aplikasi Analisis Multivariate dengan Program SPSS. Semarang: BP Universitas Diponegoro. *Jurnal Ekonomi*. Google scholar (diakses tanggal).
- Jamzani, Sodik. 2007. Pengeluaran Pemerintah Dan Pertumbuhan Ekonomi Regional (Studi Kasus Data Panel di Indonesia).
- Josephine Wuri dan Yuliana Rini Hardanti. Peranan Industri Kecil Dalam Meningkatkan Pendapatan Masyarakat (Kasus Pada Industri Kerajinan Batik Kayu di Dusun Kreet, Sendangsari, Pajangan, Bantul). *Jurnal Ekonomi*. Google scholar (diakses tanggal).
- Kamayanti, Ari. 2016. *Metode Penelitian Kualitatif Akuntansi*. Jakarta Selatan; Yayasan Rumah Peneleh.
- Kuncoro, Mudrajad. 2003. *Metode Riset Utuk Bisnis dan Ekonomi*. Jakarta: Erlangga.
- Lind & Marchal. 2007. *Teknik-teknik Statistika dalam Bisnis dan Ekonomi*. Jakarta: Salemba Empat.
- Mariana, Kristiyanti. 2012. Peran Strategi Usaha Kecil Menengah (UKM) Dalam Pembangunan Nasional. *Jurnal Ekonomi*. Google scholar (diakses tanggal).
- Merla, Liana Herawati. 2014, Pemberdayaan Ekonomi Masyarakat Melalui Kerajinan Tempurung Kelapa (Studi di Dusun Santan, Pajangan, Bantul). *Jurnal ekonomi*. Google Scholar (diakses tanggal).
- Ninna, Aristyaningsih. 2015. Kontribusi Industri Kecil Tahu Dalam Peningkatan Kesejahteraan Sosial Ekonomi Keluarga Di Lingkungan Masyarakat RT 001 RW 010 Kelurahan Pondok Cabe Ilir). *Jurnal Ekonomi*. Google Scholar (diakses tanggal).
- Saragih, Rudianto. 2014. *Perencanaan Wilayah dan Pengembangan Ekonomi Lokal Berbasis Pertanian*. Yogyakarta; Pustaka Pelajar.
- Sucipto Agus. 2011. *Studi Kelayakan Bisnis*. Malang; UIN-MALIKI PRESS.
- Suryana. 2013. *Ekonomi Kreatif*. Jakarta; Salemba Empat.