

# Productivity Analysis Method Using Partial Productivity and Total Productivity in the Framework of Industrial Business Development Tofu Craftsmen in Manado City

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## Abstract

This entrepreneurial role in economic development includes increasing per capita output and income which includes initiatives and changes in business structures and society. The main problem is the low business productivity that affects the contribution of Micro, Small and Medium Enterprises (MSMEs) in the regional economy, especially in the city of Manado. This study aims to measure the level of partial productivity and total productivity of the Tofu industry craftsmen in Manado City. The subject of this study is the owner of the tofu industry craftsman factory in Manado City. Whereas the object of the research is the business productivity of the Tofu industry, including: 1) Raw Materials, 2) Labor, 3) Materials, 4) Energy, and 5) Capital for 5 (five) weeks. Data analysis in this study uses a method of measuring productivity ratios. The result of the research and measurements show the total productivity level of tofu producers experiencing fluctuations and tends to decrease with indexes ranging from 1.04 % to 0.90% per production.

**Keywords:** partial productivity, total productivity, tofu craftsmen

## 1. Introduction

Indonesia is one of the countries with MSME many of the other countries, especially since 2014. The number of SMEs in Indonesia continues to experience growth from 2015, 2016 and 2017 the number of SMEs will continue to experience growth. When viewed from its contribution in creating broad employment opportunities, it widens the opportunity for job seekers to pursue the business with very promising prospects. MSMEs have an important and strategic role in national economic development. In addition to playing a role in economic growth and employment, MSMEs also play a role in distributing development results (Kementerian Perindustrian Republik Indonesia, 2018). There has been some attention in various parts of the world indicating that the importance of entrepreneurship in driving a country's economic progress. This entrepreneurial role in economic development encompasses more than just an increase in per capita output and income which includes initiatives and changes in business structure and society. In the industrial sector, entrepreneurs help the economy by providing jobs and can produce goods or services for consumers, both for domestic consumers and foreign consumers. Although giant companies attract more public attention and often adorn the news of the mass media, small businesses and entrepreneurial activities at least make a real contribution to social and economic life (Amalia, 2017).

The data collected from the Ministry of Cooperatives and MSMEs are as follows: in 2009 the number of MSMEs was 52,764,750 units with a 99.99% share, in 2010 the number of MSMEs was 54,114,821 units with a share of 100.53% , in 2011 the number of MSMEs was 55,206,444 units with a 99.99% share , in 2012 the number of MSMEs was 56,534,592 units with a 99.99% share , in 2013 the number of MSMEs was 57,895,721 units with a share of 99.99%. In 2014-2016 the number of MSMEs was more than 57,900,000 units and in 2017 the number of MSMEs was estimated to grow to more than 59,000,000 units. And in 2016, the President of the Republic of Indonesia stated that MSMEs that have high resilience will be able to sustain the country's economy, even during the global crisis. MSMEs have become the backbone of the Indonesian and ASEAN economies. Around 88.8-99.9% of businesses in ASEAN are MSMEs with employment reaching 51.7-97.2%. UMKM has a proportion of 99.99 % of the total number of business actors in Indonesia or as much as 56.54 million units. Therefore, cooperation for the development and resilience of MSMEs needs to be prioritized. The potential development of MSMEs in Indonesia is inseparable from the support of banks in lending to MSMEs. According to Bank Indonesia data, each year loans to MSMEs experience growth. Even though in 2015, around 60% -70% of all UMKM sectors did not have access to financing through banks (Kementerian Perindustrian Republik Indonesia, 2018).

Based on the real performance faced by most businesses, especially micro, small and medium enterprises (MSMEs) in Indonesia, particularly in the city of Manado the most prominent are low levels of productivity, low value added, and low quality products. Although it is also acknowledged that MSMEs provide great opportunities for employment for most workers, the contribution in local output is categorized as low. This is

because MSMEs, especially micro businesses have very low productivity. If wages are used as productivity, the average wage in micro and small businesses is generally below the minimum wage. This condition reflects the low productivity of the micro and small sectors when compared to larger businesses.

The problem of urgency in this study is that the low productivity of the business influences the contribution of MSMEs in the regional economy, especially in the city of Manado. Various problems will arise as a logical consequence of the globalization era where the business world has been able to penetrate traditional boundaries. Traditionally growing MSMEs are now competing with foreign MSMEs that grow in the free competition (ASEAN Economic Community). MSMEs that are able to overcome competition and emerge are superior to MSMEs that are able to meet the desires of consumers quickly and precisely at affordable prices, a variety of products and diverse services. These leading MSMEs are MSMEs that are able to overcome the increasing complexity and complexity of business through management practices that have evolved in accordance with changes in business conditions that can continue to change at any time. The formulation of the problem in this research is 1) Is the model of productivity measurement using the Partial Productivity and Total Factor Productivity effective in the process industry business pen craftsman Know? 2) What is the constraint of the Tofu industry entrepreneurs in managing their business?

## **2. Theoretical basis**

### **2.1. Entrepreneurship for Business Actors**

In the past entrepreneurship was considered only to be done through direct experience in the field and was a talent that was brought from birth, which thus entrepreneurship cannot be learned and taught. Now, Entrepreneurship is not only innate talent from birth or business experience, but can also be learned and taught. Someone who has an entrepreneurial talent can develop his talents through education. Those who become entrepreneurs are people who know the potential and learn to develop it to capture opportunities and organize businesses in realizing their dreams (Sunarya, et al., 2011).

According to Drucker (1994), entrepreneurship is the ability to create something new and different. In fact, entrepreneurship is often simply interpreted as an entrepreneurial principle or ability (Sunarya, et al., 2011). Although until now there is no exact same terminology, in general entrepreneurship has almost the same essence, which refers to the nature, character, and characteristics inherent in someone who has a strong will to realize innovative ideas into the real business world and develop it tough. In other words, entrepreneurship is a combination of creativity, innovation, and courage to face risk, which is done by working hard to form and maintain a new business (Nasution, 2010).

### **2.2. Individual Activities and Resource Utilization**

According (Trihatmoko & Harsono, 2017), Entrepreneurship is an activity by utilizing the resources of a person or organizational aims at adding value to these resources to continued growth in the value (value) sustainable economy. Entrepreneurs are subjects or business actors who change the form or position of resources in the form of goods and services in order to have added value and growth. For that purpose the entrepreneurship, this is to provide knowledge to individuals so that later they will become successful entrepreneurs.

### **2.3. Added Value and Growth in Economic Value**

The ability of entrepreneurs in calculating the results of added value is very important because it will determine the value of business profits. In financial management and accounting, the calculation structure is arranged in the financial statements, namely the Profit and Loss Statement. Output is the value of net sales or gross sales after deducting a discount. Input and production costs are the calculation of Cost of Production and / or Cost of Goods Sold (HPP). The difference between net sales and HPP is an added value, namely the level of marginal profit or in nominal value called Gross Profit (Trihatmoko & Harsono, 2017)

### **2.4. Business Innovation**

Innovation is defined as the ability to apply creativity in order to solve problems and opportunities to improve and enrich life. From the point of view of the innovation company is a company mechanism to adapt to a dynamic environment (Yuniarta, et al., 2015). Innovation is a way to continually build and develop organizations that can be achieved through the introduction of new technologies, new applications in the form of products and services, the development of new markets and the introduction of new forms. The innovation process is a personal factor that drives innovation itself, is: the desire for achievement, the nature of curiosity, the desire to take risks, the educational factors and the experience factor (Yuniarta, et al., 2015)

### **2.5. Understanding Productivity**

Productivity is a term in production activities as a comparison between output and input. According to (Herjanto, 2008), productivity is used as a benchmark for the success of an industry or MSME in producing goods or

services. So the higher the comparison, the higher the product produced. Productivity measures can vary depending on the aspects of output or input used as basic aggregates, for example: full productivity index, direct cost productivity, total cost productivity, total cost productivity, energy productivity, raw material productivity, etc.

According to Jung (2011), productivity is an important indicator that represents the economic growth of each country. Productivity in Gupta (2010) emphasizes that productivity is the result of quantitative comparisons of output and input. In the European Economic Enterprise Organization (OEEC) productivity is defined as the results obtained by comparing output with one of the factors of production. In this case it is possible to discuss the productivity of capital, investment, or raw materials based on output associated with capital, investment, or raw materials, and so forth (Yuniarta, et al., 2015).

Based on the opinions of experts, it can be concluded that productivity is a measure of output in the form of products (barang dan jasa) sold or given. This shows the effectiveness in finding a result, so that the product can be constrained as the efficiency of input that is converted into output because of input factors that state the use of resources to a minimum. Technically, suggests that productivity is a comparison between output and input (Sarjono, 2001).

## 2.6. Measurement of Business Productivity

Measures of productivity can cover all factors of production or focus on one factor or some factors of production that the company uses in production. Productivity measures that focus on the relationship between one or more of the input and output factors achieved are called partial productivity measures. Whereas productivity measures that include all input resources used in production are called total productivity. Total productivity is a measure of the combined productivity of all necessary input resources. Total productivity is a measure of financial productivity. Productivity management develops a productivity program plan based on four stages called the productivity cycle. The productivity cycle consists of four stages, namely, a) measurement, b) assessment, c) planning, and d) improvement (Kusnadi, 2009).

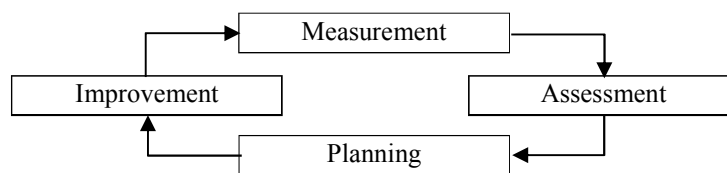


Figure 1 Productivity Cycle Mode

This cycle concept shows that increasing productivity must be started by measurement, research and planning activities of productivity itself. These four stages are very important because the cycle shows that productivity research programs are an ongoing activity and involve all operations of the company's activities. If the productivity of this system can be measured, the next step is to evaluate the level of actual productivity to be compared with the planned plan. The gap that occurs between the level of actual and planned productivity is a productivity problem that must be evaluated and searched for root causes that lead to the productivity gap (Mahmud & Anomsari, 2011).

## 3. Research Method

### 3.1. Research Subjects and Objects

This study took the location or subject in this study in the city of Manado as the capital of North Sulawesi Province which later as a reference for other regions. The subjects in this study the owners, managers, and labourers in the tofu industry craftsmen in Manado City who needed representation in helping researchers in the field in this research process. While the object of research in this study is the level of industrial business productivity of tofu craftsmen, including: 1) Labor, 2) Raw Materials, 3) Capital, 4) Energy, 5) other costs Measurement is a normative first step in carrying out a plan for the purpose of improvement or improvement as well as development goals. Sumanth (1984) developed a model for measuring productivity by taking into account the main influence of all tangible input factors on output. The model can be used not only at the aggregate level but also at the operational level such as department level. The uniqueness of the model not only measures the total productivity index but also shows certain inputs or resources that require improved utilization (Sarjono, 2001).

#### 3.1.1. Partial Productivity

Productivity measurement through the output ratio per input approach is the simplest measurement and can produce three measures of productivity. Partial productivity often also called single factor productivity is usually measured by calculating the ratio of output to input.

Because the measured is only the productivity of one input, the measure is called a partial productivity measure. The numerator is the output that is the number of units produced such as direct labor hours, or certain input

resources. While the numerator input that is number of units input resources used.

### 3.1.2. Total Productivity

This productivity shows the productivity of all the factors used to produce output. These factors are raw materials, labor, energy, capital, and others.

Because overall productivity is measured, the measure is called the total productivity measure. The numerator is the output of the total number of units produced. While the denominator is input, the total number of input resource units used.

Total productivity measurement based on the output ratio per input approach can use physical units of output and input (weight, length, content and others) or monetary units of output and input (dollars, rupiah, pound sterling, etc.)

## 4. Results and Discussion

### 4.1. Data Processing and Analysis

Data obtained from observations that have been carried out, among others, on the amount of raw material costs, labor costs, energy costs, capital costs, and material costs can be seen in table 1 below.

Table Sales Data, Raw Material Costs, Labor Costs  
 Energy Costs, Material Costs.

Description	Week / Period				
	1	2	3	4	5
<b>Sales</b>	3,208,900	2,551,987	2,896,450	2,961,000	2,739,085
<b>Capital</b>	133,440	113,500	113,000	138,547	148,756
<b>Labor costs</b>					
Salary, Wages, Honors	592,000	469,600	580,900	595,500	498,750
ASTEK	69,000	52,800	64,800	65,000	60,800
Social	94,510	80,220	83,610	87,932	79,679
total	755,510	602,620	729,310	748,432	639,229
<b>Material Costs</b>					
Raw material	365,100	310,700	355,900	378,150	359,800
Adjuvant	168,350	120,800	140,020	160,200	140,200
Packaging Material	45,932	20,761	35,000	54,588	53,591
total	579,382	452,261	530,920	592,938	553,591
<b>Energy Costs</b>					
Electricity	232,111	206,250	220,053	250,407	236,149
Water	9,020	7,785	8,950	12,150	10,368
total	241,131	214,035	229,003	262,557	246,517
<b>Miscellaneous expense</b>					
Tools	54,800	60,600	50,200	75,763	70,350
Insurance	63,986	62,756	58,835	79,185	81,545
Transport	14,340	9,651	12,732	18,625	12,586
General	405,065	366,005	391,342	408,827	415,615
Maintenance	149,421	137,948	139,260	167,500	148,905
Etc	161,831	149,294	156,329	177,351	169,75
total	849,443	786,254	808,698	927,251	729,171

Source: Manado City Tofu Maker Factory, 2018

The use of raw materials is obtained from the raw material receipt. The raw material used in making tofu is soybeans obtained from farmers from outside the region. The raw materials sent by suppliers in one week ranged from 2400 kg with a total of 48 sacks on each donkey delivery to the factory.

Data on the number of employee wages can be obtained from the owner or craftsman who records each time the employee works. Every day workers or employees are not the same, affecting the productivity of the company. In each day, employees who work 6-8 workers are divided into each section, namely the tofu making section, tofu is slicing, soybean milling section, cooking section, soybean seed washing section, and shipping section.

### 4.2. Partial Productivity Measurement

#### 4.2.1. Labor

To determine the level of productivity out put the sale of the labor input can be seen below, as follows:

Table Labor Productivity

Week / Period	Total Output	Total Input	Productivity Level	Index (%)
1	3.208,900	755,510	4.24	1.06
2	2,551,987	602,620	4.23	1.06
3	2,896,450	729,310	3.97	1.00
4	2.961,000	748,432	3.95	0.99
5	2,739,085	639,229	4.28	1.07

Source: Data processed, 2018

From table 2 it can be seen that the level of productivity of sales output on labor costs fluctuates. Only there was a period V increased by 4, 28. This is because the workers are able to fulfill the number of orders.

Table Overall Labor Productivity

Total Output	Total Input	Productivity Level
14,357,422	3,475,101	4,13

Source: Data processed, 2018

Also seen in table 3 the partial productivity value for the overall workforce is 4 , 13 . This shows that every use of labor input is Rp. 1,000, 000 would be output Rp. 4,130,000 , -

#### 4.2.2. Raw material

To determine the level of productivity out put the sale of the raw material input can be seen below, as follows:

Table 4. Productivity of Raw Materials

Week / Period	Total Output	Total Input	Productivity Level	Index
1	3,208,900	579,382	5.53	1.01
2	2,551,987	452,261	5.64	1.03
3	2,896,450	530,920	5.45	1.00
4	2.961,000	592,938	4.99	0.91
5	2,739,085	553,591	4.94	0.90

Source: Data processed, 2018

From table 4 it can be seen that the level of productivity of sales output on raw material costs decrease. Only there is period II that experiences an increase in productivity, which is equal to 5.64. This is due to the difficulty of the availability of raw materials and the relatively expensive price of raw materials.

Table Overall Productivity of Raw Materials

Total Output	Total Input	Productivity Level
14,357,422	2,709,092	5.29

Source: Data processed, 2018

Also seen in table 5 the value of partial productivity for raw materials as a whole is 5.29. This shows that each use of raw material inputs is Rp. 1,000,000 will output Rp. 5,290,000, -

#### 4.2.3 Capital

To determine the level of productivity out put the sale of the capital input can be seen below, as follows:

Table Capital Productivity

Week / Period	Total Output	Total Input	Productivity Level	Index
1	3,208,900	133,440	24.04	0.93
2	2,551,987	113,500	22.48	0.87
3	2,896,450	113,000	25.63	1.00
4	2.961,000	138,547	21.37	0.83
5	2,739,085	148,756	18.41	0.71

Source: Data processed, 2018

From table 6 it can be seen that the level of productivity of sales output against capital costs has decreased. There is only period III which experienced an increase in capital productivity, which amounted to 25.63.

Table Overall Capital Productivity

Total Output	Total Input	Productivity Level
14,357,422	647,243	22.18

Source: Data processed, 2018

Also seen in table 7 the partial productivity value for the overall capital cost is 22.18. This shows that each use of capital input is Rp. 1,000,000 will produce an output of Rp. 22,180,000

#### 4.2.4. Energy

To determine the level of productivity of sales output on energy input can be seen below, as follows:

Table Energy Productivity

Week / Period	Total Output	Total Input	Productivity Level	Index
1	3.208,900	241,131	13.30	1.05
2	2,551,987	214,035	11.92	0.94
3	2,896,450	229,003	12.64	1.00
4	2.961,000	262,557	11.27	0.89
5	2,739,085	246,517	11.11	0.87

Source: Data processed, 2018

From table 8 it can be seen that the level of productivity of sales output on energy costs has decreased. Only in period III experienced an increase in capital productivity, which amounted to 12.64.

Table Overall Energy Productivity

Total Output	Total Input	Productivity Level
14,357,422	1,193,243	12.03

Source: Data processed, 2018

Also seen in Table 9 partial productivity value to the overall energy costs are 12.03. This shows that each use of energy input is Rp. 1,000,000 will produce an output of Rp. 12,030,000, -

#### 4.2.5. Other costs

To determine the level of productivity of sales output against other input costs can be seen below, as follows:

Table Other Cost Productivity

Week / Period	Total Output	Total Input	Productivity Level	Index
1	3.208, 900	849, 443	3.77	1.05
2	2,551, 987	786, 254	3.24	0.90
3	2,896, 450	808, 698	3.58	1.00
4	2.961, 000	927, 251	3.19	0.89
5	2,739, 085	729, 171	3.75	1.04

Source: Data processed, 2018

From table 10 it can be seen that the level of productivity of sales output on energy costs has decreased. Only in period I experienced an increase in productivity of other costs, which amounted to 3.77 .

Table Overall Productivity Costs Other

Total Output	Total input	Productivity Level
14,357, 422	4 , 100, 817	3.50

Source: Data processed, 2018

Also seen in table 11 the value of partial productivity for other costs as a whole is 3.50. This suggests that any use of inputs other costs amounting to Rp. 1,000,000 will produce an output of Rp. 3,500,000, -

#### 4.2.6. Tofu Factory Performance Measurement Per Week

To find out the performance level of the Tofu factory productivity per week can be seen below, as follows:

Table Performance of Tofu Production per Week

Information	Period / week				
	1	2	3	4	5
Sales	3.208,900	2,551,987	2,896,450	2.961,000	2,739,085
Cost of goods sold	2,558,906	2,168,670	2,410,931	2,669,725	2,317,264
Gross profit	649,994	383,317	485,519	291,275	421,821
Productivity	1.25	1.17	1.20	1.10	1.18
Index	1.04	0.97	1.00	0.91	0.98

Source: Data processed, 2018

From the results of Table 12 above, production performance based on sales data tends to fluctuate; this indicates that the increase or fall in sales data is caused by market demand adjusted to the number of consumer orders. While the performance tends to be stable, it's just that in the IV period it has decreased somewhat. This decline was also caused by the availability of raw materials which tended to be difficult accompanied by relatively expensive prices.

#### 4.3. Total Productivity Measurement

To find out the total productivity of the total *output* sales data and the total number of *input* factors per week can be seen below, as follows:

Table Total productivity of output against inputs

Total Output	Total Input	Productivity Level
14,357, 422	12,125, 496	1.18

Source: Data processed, 2018

From the results of table 13 above, it can be seen that the total productivity value is 1.18. So that can be interpreted that each use of total input is Rp. 1,000,000 produces a total output of Rp. 1,180,000 per production.

#### 4.4. Discussion

The results of the calculation and evaluation of partial productivity and total productivity which includes the productivity of raw materials, labor, capital, energy, and other costs can be explained as follows:

##### 4.1.1. Partial Productivity

- Labor Productivity

Labor productivity in period I was 4.24 with an index rate of 1.06% . For period II labor productivity was 4.23 with an index rate of 1.06% . For period III labor productivity amounted to 3.97 with an index figure of 1.00%. For the IV period, labor productivity was 3.95 with the index number of 0.99%. For period V labor productivity is 4.28 with an index rate of 1.07%.

Labor productivity increases only in period V, and decreases occur in periods III and IV because the number of outputs and inputs increases but produces a ratio that is smaller than the base period. The highest labor productivity occurs in period V of 4.28 with an index number of 1.07%, while the lowest labor productivity occurs in period IV of 3.95 with the index number of 0.99%.

- Raw Material Productivity

Raw material productivity in period I was 5.53 with an index rate of 1.01%. For period II the productivity of raw materials amounted to 5.64 with an index number of 1.03%. For period III the productivity of raw materials is 5.45 with an index figure of 1.00%. For period IV, raw material productivity is 4.99 with an index of 0.91%. For period V the productivity of raw materials is 4.94 with the index number of 0.90%.

The productivity of raw materials rose only in the second period, and a decrease occurred in the period IV dan V due to the number of outputs and inputs are increased but the yield ratio is smaller than the base period. The highest labor productivity occurred in period II of 5.64 with an index number of 1.03 %, while the lowest raw material productivity occurred in period V of 4.94 with an index of 0.90 %.

- Capital Productivity

Capital productivity in the first period amounted to 24.04 with an index of 0.93%. For period II capital productivity was 22.48 with an index of 0.87%. For period III capital productivity was 25.63 with an index rate of 1.00%. For period IV capital productivity amounted to 21.37 with an index figure of 0.83%. For the period V capital productivity by 18, 41 with the index number 0.71%.

Capital productivity increases only in period III, and decreases occur in period V because the number of outputs and inputs increases but produces a ratio that is smaller than the base period. The highest labor productivity occurred in the period II I amounted to 25.63 with an index number of 1.0 0 %, while the lowest capital productivity occurred in period V of 18.41 with the index number of 0.71 %.

- Energy Productivity

Energy productivity in period I is 13.30 with an index number of 1.05%. For period II capital productivity amounted to 11.92 with an index rate of 0.94%. For period III, capital productivity was 12.64 with an index rate of 1.00%. For period IV capital productivity amounted to 11.27 with an index of 0.89%. For period V, capital productivity was 11.11 with an index of 0.87%.

Energy productivity increases only in period I, and decreases occur in period V because the number of outputs and inputs increases but produces a ratio that is smaller than the base period. The highest capital productivity occurs in period I of 13.30 with an index figure of 1.00%, while the lowest capital productivity occurs in period V of 11.11 with the index of 0.87%.

- Other costs

Other cost productivity in the first period is 3.77 with an index rate of 1.05%. For period II capital productivity amounted to 3.24 with an index number of 0.90%. For period III capital productivity was 3.58 with an index figure of 1.00%. For period IV capital productivity amounted to 3.19 with an index figure of 0.89%. For period V, capital productivity is 3.75 with an index rate of 1.04%.

The productivity of other costs increases only in period I, and the decline occurs in period IV because the number of outputs and inputs increases but produces a ratio that is smaller than the base period. The highest capital productivity occurs in the first period of 3.77 with an index number of 1.05%, while the lowest capital productivity occurs in period IV of 3.19 with the index number of 0.89%.

##### 4.1.2. Evaluation of Total Productivity Performance

Total productivity in period I is 1.25 with an index rate of 1.04%. For period II total productivity of 1.17 with an

index of 0.97%. For period III total productivity of 1.20 with an index figure of 1.00%, for period IV total productivity is 1.10 with an index of 0.91%. For period V the total productivity is 1.18 with the index number 0.98.

In other words, total productivity fluctuates in each period. Where the factor taken into account in total productivity is the total output as an output element.

#### 4.1.3. Constraints faced by Craftsmen in Producing Tofu-Tempe

From the results of direct interviews with the Tofu-Tempe craftsmen, the main constraints were raw materials. The city of Manado is not a soybean-producing region, so the raw material for soybeans is imported from outside the region, even from abroad, for example the United States and Brazil. These countries are well-known as the number one and high-quality soybean producers.

Soybeans both locally and imported from outside the region are very affordable, but are unable to meet the demand for supply of raw materials for Tofu-Tempe craftsmen who are almost in all corners of Manado. For this reason, there is a need to supply more soybeans imported from abroad, even though the price of raw materials is relatively more expensive. However, to meet the scale of market demand, willing or unwilling, craftsmen must buy raw materials so that their production can continue on an ongoing basis and can meet the needs of the community in consuming Tofu Tempe remains available.

Another obstacle is the availability of nutmeg fuel for the process of cooking soybean juice in the process of making tofu. Nutmeg skin itself is much needed, in addition to the coals produced from Nutmeg's skin, it is durable, and in terms of economical Pala skin can reduce the cost of fuel needs less. However, the price is relatively more expensive and the availability is quite difficult, because the demand for Nutmeg skin needs is many and not comparable to the availability.

In addition, other constraints from the observations of researchers in the field also exist during working hours. Tofu-Tempe craftsmen almost never get a day off. Craftsmen cannot maximize their time to vacation with family. Because of the long working conditions, so off just ad a on certain days only, so that workers during the holiday chose to go home and never come back again. This is what makes the Tofu-Tempe craftsmen very difficult in finding substitutes and new workers who can work full time.

## 5. Conclusions

Re-planning productivity needs to be done to increase plant productivity. Know both partial productivity and total productivity. The possible efforts can be made in achieving these goals as alternative breakthroughs, namely: (1) The use of fixed inputs to produce greater output. Know-Tempe craftsmen are able to utilize inputs better than before, for example making improvements in each production process; (2) Reduction of inputs to produce the same output . Tofu makers do not add output, but inputs are used more economically and try to avoid unimportant input costs. For example by saving raw materials labor, capital, energy, but still produce the same amount of products. (3) The use of larger inputs to produce a much larger output. Tofu-Tempe production growth through output continues to increase due to additional investment and other costs incurred. Examples by increasing the amount of raw material usage or by increasing the expertise of the workforce.

## References

- Amalia, D., 2017. *Perbedaan UMKM: Perkembangannya di Indonesia*. [Online] Available at: <https://www.jurnal.id/id/blog/2017/perbedaan-umkm-perkembangannya-di-indonesia> [Accessed 23 Februari 2018].
- Herjanto, E., 2008. *Manajemen Operasi*. Edisi Ketiga ed. Jakarta: Grassindo.
- Kementerian Perindustrian Republik Indonesia, 2018. Kontribusi UMKM Naik. *Berita Industri*, 1 Januari , p. 14200.
- Kusnadi, E., 2009. *Analisis Produktivitas Terhadap Penyeimbangan Lintasan. (Unpublished) Undergraduate Thesis*, Jakarta: Program Studi Mercu Buana.
- Mahmud & Anomsari, A., 2011. *Analysis of the Influence of Entrepreneurship Orientation Management Ability, and Business Strategy in Improving Company Performance (Studies in Small Medium Enterprises in Barito Semarang Business Area)*, Semarang: Fakultas of Economics Dian Nuswantoro University.
- Nasution, M. N., 2010. *Manajemen Mutu Terpadu (Total Quality Management)*. Jakarta: Ghalia.
- Sarjono, H., 2001. Model Pengukuran Produktivitas Berdasarkan Pendekatan Rasio Output Per Input. *Journal The WinnERS*, 2(2), pp. 130-136.
- Sunarya, A., Sudayono, A. & Saefullah, 2011. *Kewirausahaan*. Yogyakarta: CV. Andi Offset.
- Trihatmoko, R. A. & Harsono, M., 2017. *Kewirausahaan: Membentuk dan Mengembangkan Unit Bisnis Handal dan Mapan*. Edisi Pertama, Cetakan 1 ed. Yogyakarta: UPP STIM YKPN.
- Yuniarta, G. A., Sulindawati, E. & Purnamawati, A., 2015. *Kewirausahaan Dan Aspek-Adpek Studi Kelayakan Usaha*. Yogyakarta: Graha Ilmu.