

# THE ROLE OF CREATIVE ENTREPRENEURS AS MEDIATION IN AFFECTING PRODUCTION FACTORS ON THE PERFORMANCE OF CATFISH FARMERS IN PADANG

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**Abstract:** The performance of fish cultivators, especially catfish in Padang, is characterized by the ability of fish cultivators to produce fish in accordance with the quality, quantity and timeliness of production so that consumer needs are met. This study aims to determine and analyze the effect of production factors on performance and to identify and analyze the role of creative entrepreneurs as a mediation that influences production factors on the performance of cultivating entrepreneurs. The study used a quantitative approach with the case method by collecting data from 40 entrepreneurs. The analytical technique used in this research is descriptive analysis and statistical analysis using SmartPLS (Partial Least Square) 3.0 software. The results showed that production factors affect the performance and the mediating role of creative entrepreneurs (cultivators) was able to influence production factors on the performance of cultivators (partial mediation). There was something interesting from this research, that the mediating role of creative entrepreneurs had a negative coefficient of -0.601. This meant that creative efforts made to be able to provide benefits from fish farming will actually reduce profits. Researcher suspects that the creativity that has been carried out by entrepreneurs has been maximized; all that can be done at this time is only to run a business according to consumer demand.

**Keywords:** Factors of production, creative entrepreneurship, and performance of cultivators

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## 1. Introduction

The increasing demand for fish has certainly a positive meaning for the development of fisheries, especially for an archipelagic country such as Indonesia which has a fairly wide water potential and potential for fisheries development, both fishing and aquaculture (Widodo and Suardi, 2006:1). The high demand in the world market for fishery products is often not met. Therefore, it is necessary to overcome the problem of meeting the increasing demand from importing countries from year to year. One way is to increase fishery production through aquaculture.

Padang is one of the areas with the largest fishery production in West Sumatra, both from marine catchment fisheries and aquaculture activities in public water and freshwater aquaculture. Padang has the potential of Padang fish resources which are quite large, which can be used as a source of life for the community. The potential of aquaculture in Padang is part of the Fishery Resources produced through cultivation in fresh water. Most of the potential for freshwater fish cultivation comes from cultivation carried out by cultivators of gouramy,

pangas catfish, tilapia, goldfish, and catfish. Aquaculture production based on fish species in Padang can be seen in Table 1 as follows.

**Table 1: Aquaculture Production (tons) by type of fish in Padang in 2016-2020**

No	Year	gouramy	Pangas catfish	tilapia	goldfish	catfish	Others	total
1	2016	84,10	153,39	411,83	36,20	815,14	4,56	1.505,22
2	2017	-	-	470,26	17,22	1.769,47	714,84	2.971,79
3	2018	30,29	172,42	402,57	24,00	1.708,44	3,92	2.341,64
4	2019	36,12	153,41	456,00	29,12	2.118,47	86,31	2.879,43
5	2020	30,19	121,89	326,99	23,74	1.524,09	94,35	2.121,25
Average		45,175	150,277	413,53	26,056	1.587,122	180,796	2.363,866

Source: Padang Fisheries Service, 2021

From Table 1, it can be seen that the potential for freshwater fish cultivation is dominated by catfish, tilapia, and pangas catfish. If you look at the production, then by comparing the target and the expected level of achievement for the last five years, the production has fluctuated as shown in table 2 as follows.

**Table 2: Targets and Achievements (tons) of Aquaculture in Padang City in 2016-2020**

No	year	Target	achievement	up/down
1	2016	1.251,32	1.505,22	20,29% (up)
2	2017	2.279,00	2.971,79	30,40% (up)
3	2018	3.039,00	2.341,64	22,95 % (down)
4	2019	3.927,00	2.879,43	26,68% (down)
5	2020	2.068,28	2.121,25	2,56% (up)

Source: Padang City Fisheries Service, 2021

The occurrence of fluctuations in fish farming production carried out by cultivators, among others, is caused by the price and availability of feed, seeds, water availability/irrigation, consumer demand, and at certain times caused by disease and natural disasters/floods. Fluctuations in fish production that occur, especially if the target is not achieved will cause the greatest loss to occur to cultivators because farmers have incurred costs to meet production factors as well as efforts to be creative both in cultivators and in post-harvest/processing. Based on the Padang Fisheries Service Annual Report (2020), during 2017-2019 there were fluctuations in aquaculture production, the causes of which were 1) natural disasters, 2) floods, 3) landslides, 4) fish feed prices, 5) availability of fish seeds. And 6) market speculation. Based on the data in Table 1.1 and Table 1.2, the researchers then observed phenomena in the field, that seed quality, seed prices, seed availability, and the role of agents (distribution channels) were closely related to the performance of cultivating entrepreneurs. Furthermore, the availability of feed/pellets can be considered fixed/given because the availability/price is determined by the feed company so that farmers have no choice; the researcher states that seeds and feed are crucial in catfish farming.

According to research conducted by Asmanah et al. (2009) states that the variables of fish seed, fertilizer and land area have a positive effect on aquaculture production. Land area, fish seeds and fertilizers are important factors in the production process of catfish aquaculture where the cost of purchasing fish seeds and fertilizers is an indicator of working capital variables. The more seeds and fertilizers are purchased, the greater the capital spent. Dissemination and development of the latest aquaculture technology must continue to be communicated with the community; a touch of technology accompanied by increasing scientific publications can have a positive impact on the formation of a positive image of Indonesian aquaculture products in the eyes of the world (Novriadi, 2013). Rinaldi (2014) states that the area has a positive effect on aquaculture production. Manurung (2014) states that working capital has a positive effect

on aquaculture production. Wang (2014) states that labor has a positive effect on fishery production. And, Utami (2014) states that technology has a significant effect on aquaculture production.

A study of financial analysis of African catfish (*Clarias gariepinus*) farming conducted by Mahsaiba et al. (2013) states that there is a relationship between the total area of the pond and the production level of African catfish, the factors that influence the production and productivity of African catfish, cost composition, income of African catfish farming, and financial analysis of African catfish farming. The results showed that the relationship between the total area of the pond and the production level of African catfish has a very strong relationship, and then the factors that affect productivity by hectare indicate that the dependent variable and the independent variable mutually influence the productivity of African catfish. The composition of costs in African catfish farming is the price of feed with a percentage of 86.5 percent, the price of seeds with a percentage of 12.6 percent and labor wages with a percentage of 0.9 percent; and the average income obtained by farmers during the harvest period is Rp. 266,602,600 and declared that African catfish farming is feasible.

The differences in the results of research regarding production factors, financial analysis and other relationships, become opportunities for cultivators to be creative, the goal of which is that fish cultivation must be able to be carried out and cultivators must be able to meet consumer needs, especially *pecel* catfish farmers and smoked catfish processing.

The existence of research results which state that there are influential variables such as quality, price, and availability of seed stock on performance and the presence of some research results which state that it has no effect on performance indicates that there is an opportunity for researchers to conduct further research. From field observations and the phenomena that researchers observe, aquaculture entrepreneurs always make creations, especially for fish feed formulations, post-harvest processing, and fulfillment of fish seeds. Researchers have not found any journals/research results related to the role of creative entrepreneurs as a mediation that is able to influence production factors on the performance of catfish cultivators.

In order to be more focused on this research, the objectives to be achieved in this study are to determine and analyze 1) the effect of production factors on the performance of fish cultivators, 2) the influence of production factors on creative entrepreneurs, 3) the influence of creative entrepreneurs on the performance of fish cultivators, and 4) the role of creative entrepreneurs as a mediation that affects production factors on the performance of catfish cultivators in Padang. Furthermore, based on the results of previous studies that still have not provided firmness on efforts to improve the performance of catfish farmers, the researchers set a research focus with the title "Role of creative entrepreneurs as a mediation in affecting production factors on the performance of catfish farmers in padang".

## 2. Literature Review

### Cultivator Performance

Mangkunegara (2005) defines performance as the result of work in quality and quantity achieved by an employee in carrying out his duties in accordance with the responsibilities given to him. Koesmono (2005) says that performance is an employee's achievement of the tasks that have been set. Soeprihantono (1998) says that performance is the result of an employee's work during a certain period, compared with various possibilities, for example standards, targets, goals, and criteria that have been determined in advance and have been mutually agreed upon. Thus the performance of cultivators in this case is catfish cultivators is the ability of farmers to produce catfish consumption in accordance with the quality and quantity demanded by consumers in accordance with the agreed time.

According to Kopelman (1988), the factors that influence performance are: individual characteristics, organizational characteristics, and work characteristics. Furthermore, Kopelman explains that in addition to being influenced by environmental factors, performance is also highly dependent on individual characteristics such as abilities, knowledge, skills, motivation, norms and values.

Performance indicators according to Mangkunegara (2013) included Quality, Quantity, Reliability, and Work Attitude. Furthermore, Robbins (2006) states that in addition to quality and quantity, also punctuality, effectiveness, independence, and work commitment. In this study, researchers only used performance indicators on the dimensions of quality, quantity, timeliness and effectiveness.

### **Factors of Production**

In simple terms, the factors of production are all the resources needed to produce and to provide added value for the goods or services produced. Production factors include natural production factors, labor, capital, and managers/entrepreneurs (Sofyan, 2008:15). The production function or also called operations is a function that performs the activity of converting and processing production resources (a set of inputs) into outputs, goods or services, as previously planned. This production function aims to create an increase in the use/value added of an object due to the improvement of the shape of the object (input) concerned. Thus the production factors needed in catfish cultivators include ponds, irrigation, seeds, feed, capital, labor, medicines, and technology.

According to research conducted by Asmanah et al. (2009) states that the variables of fish seed, fertilizer and land area had a positive effect on aquaculture production in Central Java. Land area, fish seeds and fertilizers are important factors in the production process of catfish aquaculture where the cost of purchasing fish seeds and fertilizers is an indicator of working capital variables. The more seeds and fertilizers that are purchased, the greater the capital spent. In this study, the indicators of production factors used consist of seeds, feed, labor, and ponds/pool area.

### **Creative Entrepreneur**

Entrepreneurs or enterpriser are people who are smart or talented in recognizing new products, determining new production methods, arranging operations for procuring new products, arranging operations for procuring new products, marketing them and managing operating capital. While creative is having the ability to create (KBBI V, 2008). Thus, it can be interpreted that creative entrepreneurs are people who have the ability to create new products, new processes, are able to market them and are able to manage their production operating capital. Entrepreneurial characteristics are the main characteristics of entrepreneurship that can be seen from their character and behavior, namely confident and optimistic, task and result oriented, dare to take risks and like challenges, leadership, and future oriented. Creativity can be clearly stated as part of the ability of an entrepreneur that can affect the successful performance of a business (Pretorius, et al., 2005). Creativity is also an important principle for building a competitive spirit in a new endeavor to improve performance. In this study, the indicators of creative entrepreneurship taken from McClelland in Wiratmo (2001:24) are as follows: 1) Desire to excel 2) Desire to be responsible 3) Perception of the possibility of success 4) Orientation to the future.

### **Research Model**

Based on the description above, the research model can be designed as follows:

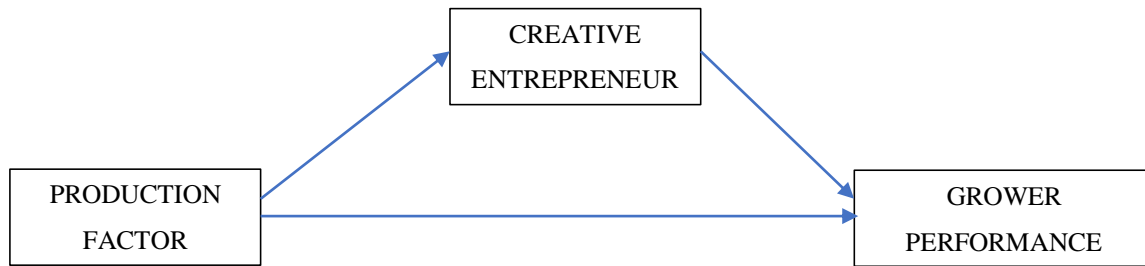


Figure 1: Research Model

### Hypothesis

Based on the background of the problem and the research model above, the research hypothesis can be formulated as follows:

Hypothesis 1: Production factors affect the performance of catfish farmers

Hypothesis 2: Production factors affect creative entrepreneurship

Hypothesis 3: Creative entrepreneurs affect the performance of catfish farmers

Hypothesis 4: Creative entrepreneurs act as a mediation that affects production factors on the performance of catfish cultivators.

### 3. Method

#### Research Design and Population

The object of this research was active catfish cultivator in Padang. This research used quantitative methods. Considering the population of active cultivators at the time of the study amounted to 40 people, all populations were immediately used as samples or Saturated Sampling (census). Data were collected using a questionnaire; the type of questionnaire used was a closed questionnaire. The data measurement technique used in this study was the Likert scale. Then, the data were analyzed using SEM (Structural Equation Modeling) analysis which was operated through the SmartPLS 3.0 application.

#### Variables and Operational Definitions

In conducting this study, the researcher used 3 variables consisting of production factors, creative entrepreneurs, and performance variables for catfish cultivators.

##### Variable factors of production

Factors of production are all the resources needed to produce and to provide added value for the goods or services produced. In this study, the indicators of production factors used consist of seeds, feed, labor, and ponds/pool area.

##### Variable creative entrepreneur

Creative entrepreneurs are people who have the ability to create new products; new processes are able to market them and are able to manage their production operating capital. In this study, the indicators of creative entrepreneurship taken from McClelland in Wiratmo (2001:24) are as follows: 1) Desire to excel 2) Desire to be responsible 3) Perception of the possibility of success 4) Orientation to the future.

##### Variable performance of catfish cultivators

The performance of catfish farmers is the ability of farmers to produce catfish consumption in accordance with the quality and quantity demanded by consumers according to the agreed time.

In this study, performance indicators are measured using indicators of quality, quantity, timeliness and effectiveness.

#### 4. Result and Discussion

##### Convergent Validity Test

Validity test was used to measure the validity of the questionnaire. In this study, the validity test was carried out by correlation between the score of the question items and the total score of the construct or variable; then compared with the number 0.6. In most references a factor weight of 0.50 or more was considered to have strong enough validation to explain latent constructs (Hair et al, 2010; Ghozali, 2008). Although some other references (Ferdinand, 2000) explained that the weakest loading that could be accepted was 0.40. The results of the validity test of each variable using the PLS 3.0 software program were shown in Figure 2 below.

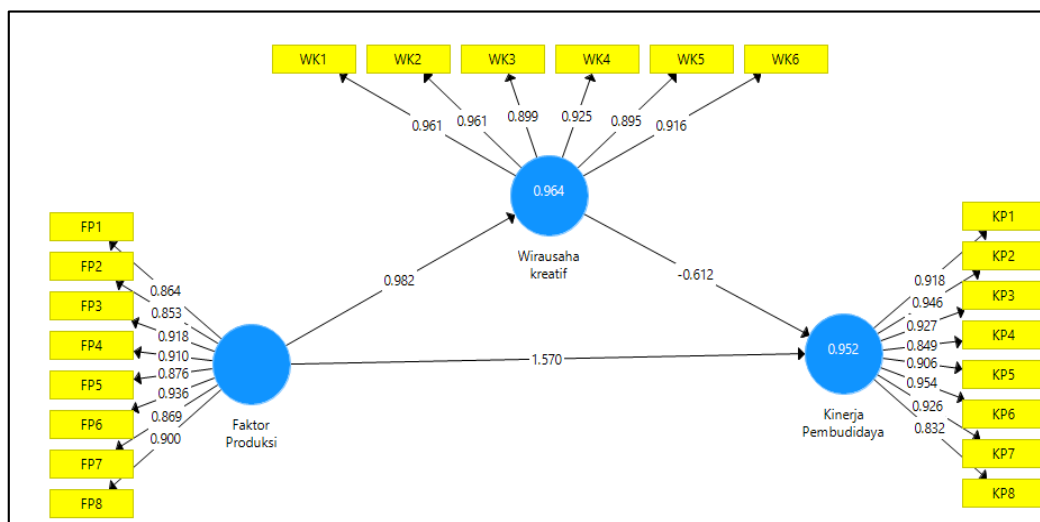


Figure 2: Validity Test  
Source: Processed Data SmartPLS 3.0

From Figure 2 above, it could be seen that the Rcount value was greater than 0.6. It could be concluded that all 22 questions were valid. Furthermore, to further prove and convince again, it could be seen in the Output value of AVE and Composite Reliability. The following presented the results of the AVE value and composite reliability in Table 3 below.

**Table 3: AVE value and composite reliability**

	Composite Reliability	Average Variance Extracted (AVE)	Description
Production_Factor	0,969	0,794	Reliabel
Performance_Cultivator	0,974	0,825	Reliabel
Entrepreneurial_creative	0,973	0,858	Reliabel

Source: Processed Data SmartPLS 3.0

Based on the table above, it could be seen that all the average variance extracted (AVE) values for each variable were above 0.50. Furthermore, the results of composite reliability in the table above showed that all variables had met the requirements, which ought to be more than 0.70. It could be concluded that the convergent validity had been met.

**Reliability Test**

A questionnaire was said to be reliable if a person's answers to a question were consistent or stable over time. The reliability variable was determined based on the cronbach's alpha value, if the cronbach's alpha value was greater than 0.7, then the variable was reliable. The results of the reliability test of each variable using the PLS program was shown in Table 4 below:

**Table 4: Reliability Test**

variabel	Number of question	Cronbach's Alpha	Score rho_A	Minimum Score	D
Production_Factor	8	0,963	0,964	0,7	Reliabel
Performance_Cultivator	8	0,969	0,971	0,7	Reliabel
Entrepreneurial_creative	6	0,967	0,969	0,7	Reliabel

Source: Processed Data SmartPLS 3.0

From the table above, it could be seen that all Cronbach's Alpha, rho\_A and Composite Reliability values were greater than 0.7. It could be concluded that all variables were reliable.

**Coefficient of Determination**

The coefficient of determination uses R-squared which showed what percentage of the variation of endogenous/criteria constructs could be explained by the constructs that were hypothesized to influence them (exogenous/predictors). Based on the results of data processing in Figure 2, it could be seen that the R-squared value of the creative entrepreneur variable was 0.964 and the cultivator's performance variable was 0.952. These results indicated that the creative entrepreneur variable could be explained by the production factor variable of 96.4%, while the remaining 3.7% was explained by other variables not discussed in this study or other factors outside the model. Then the cultivator's performance variable could be explained by the production factor variable of 95.2%, while the remaining 4.8% was explained by other variables not discussed in this study or other factors outside the model.

**Hypothesis Test**

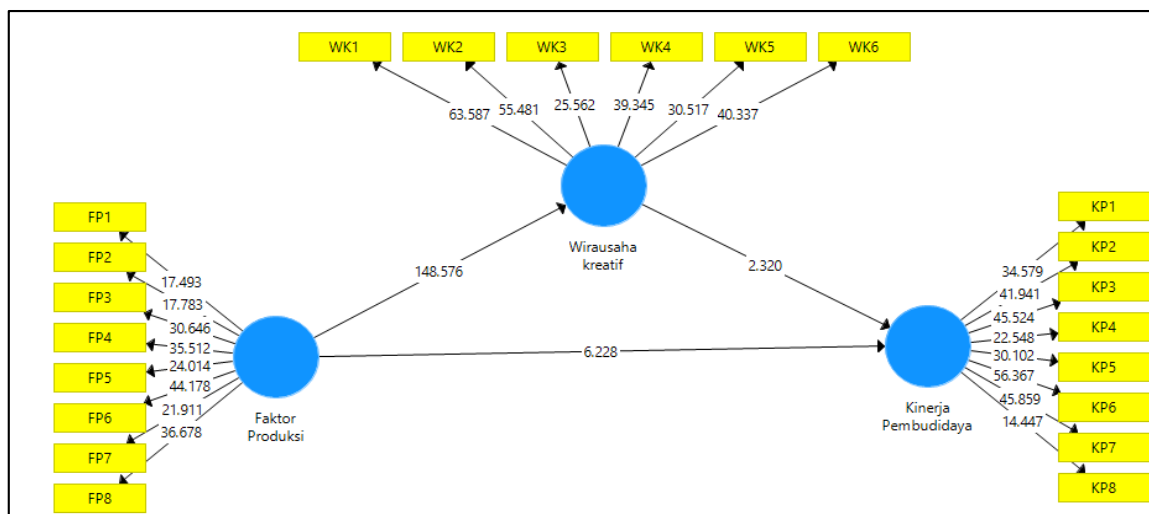


Figure 3: Hypothesis Test  
Source: SmartPLS Data Process

Table 5: Hypothesis Test

Effect Between Variables	Original Sample (O)	T Statistics ( O/STDEV )	P Values	Decision Values
Production_Factor Cultivator_Performance	-> 1,570	6,228	0,000	Hypothesis accepted
Production_Factor Creative_Entrepreneur	-> 0,982	148,576	0,000	Hypothesis accepted
Entrepreneur_creative Performance_Cultivator	-> -0,612	2,320	0,021	Hypothesis accepted
Production_Factor Creative_Entrepreneur	-> -0,601	2,303	0,022	Hypothesis accepted
Cultivator_Performance				

Source: Processed Data SmartPLS 3.0

The explanation of the hypothesis from the statistical results using SmartPLS 3.0 is as follows:

### Effect of Production Factors on Cultivator Performance

There was a direct effect of the production factor variable on the performance of cultivators with a p-value of  $0.000 < 0.05$  with a coefficient value of 1.570. Or, in other words, an increase in production factors would be able to increase the performance of cultivators by 1,570 because the coefficient value (original sample) was positive and significant. Thus the results of hypothesis testing H1 were accepted.

### The Influence of Production Factors on Creative Entrepreneurs

There was a direct effect of the variable production factors on creative entrepreneurs with a p-value of  $0.000 < 0.05$  with a coefficient value of 0.982. This meant, in other words, an increase in production factors would be able to increase the value of creative entrepreneurship by 0.982 because the coefficient value (original sample) was positive and significant. Thus the results of hypothesis testing H2 were accepted.

### The Influence of Creative Entrepreneurs on the Performance of Cultivators

There was a direct influence of the creative entrepreneur variable on the performance of cultivators with a p-value of  $0.021 < 0.05$  with a coefficient value of -0.612. Or, in other words, an increase in production factors would cause a decrease in the performance value of cultivators by -0.612 because the coefficient value (original sample) was negative and significant. Thus the results of hypothesis testing H3 were accepted.

### The mediation effect of creative entrepreneurs on production factors and performance of catfish cultivators.

The result of testing the fourth hypothesis was to measure the mediating role of creative entrepreneurship on the performance of catfish cultivators. The results stated that creative entrepreneurship had a significant and negative effect where the p value was  $0.022 < 0.05$  with a coefficient value of -0.601. This meant that the mediating role of creative entrepreneurs had not been able to influence production factors to increase the performance value of catfish cultivators because the coefficient value (original sample) was negative and significant. However, the results of hypothesis testing H4 were accepted.

## Discussion

### Production factors affect the performance of catfish cultivators.

Based on the results of the study it was showed that there was a positive and significant influence between production factors (seeds, feed, labor, and pond area) on the performance of catfish cultivators in Padang. The results of this study were not much different from the results



of research conducted by Negara et al (2017) where the factors of working capital, pond area, labor and technology simultaneously had a positive and significant effect on catfish aquaculture production in Denpasar. Separately, Rinaldi (2014) states that the area had a positive effect on aquaculture production. Manurung (2014) states that working capital has a positive effect on aquaculture production. Wang (2014) states that labor has a positive effect on fishery production.

In general, catfish cultivators are able to increase catfish production, whether by adding capital to procure seeds, expanding ponds, adding labor or providing sufficient fish feed/pellets to increase production. However, this increase in production must of course go through careful consideration so that the increase in catfish production can be absorbed by the market. This reason is a major consideration for farmers because if catfish should have been harvested, but because consumer demand is low it will create additional burdens for farmers, for example an extended harvest period will increase feed and labor costs or if the harvested fish must be processed into smoked catfish. The highest outer loading value indicates that experienced workers are able to produce consumption-sized fish on time. This is what states that empirically or research results; cultivators already know that to increase catfish production it can be done in such a way by manipulating various production factors but the condition is that all production must be absorbed by consumers.

That is why, that production factors affected the performance of farmers because entrepreneurs/cultivators are very familiar with various efforts for catfish farming. Cultivators had tried various efforts starting from the procurement of seeds, fish feed/pellets, and expansion of ponds with stocking density and marketing of the results not only in Padang but also outside the region such as to Riau-Jambi and North Sumatra. The best results as stated by catfish cultivators, taking into account production factors, the optimal performance value of cultivators is to market their catfish products around Padang or areas around culinary centers (specifically *pecel* catfish) in West Sumatra.

### **Production factors affect creative entrepreneurs.**

Based on the results of the study, it was showed that there was a positive and significant influence between production factors (seeds, feed, labor, and pond area) on creative entrepreneurs in Padang. The results of this study indicated that the creativity of cultivators has almost been carried out on all factors of production. In terms of seed availability, cultivators will procure seeds either from seeders in Padang or look for them outside the area, for example to Riau Province or Jambi Province. On the other hand, the limited feed will be met by making their own feed by utilizing existing raw materials around Padang. Based on the experience that had been passed by cultivators with an average of over five years and confidence in the development and application of all creations, including if there are new discoveries, most all cultivators will apply these new discoveries for example about superior seeds, new feed formulations, and others.

### **Creative entrepreneurs affect the performance of catfish farmers.**

Based on the results of the study, it showed that there is a significant influence between creative entrepreneurs on the performance of catfish farmers but with a negative coefficient (-0.612), meaning that the creativity carried out by farmers so that performance increases actually causes a decrease. The results of the research and discussions with catfish cultivators stated that the creation or creativity that was recently applied was almost 65% unprofitable. Then the effort of processing smoked catfish only 57% of cultivators said it was profitable, while 43% said it was not profitable and fish processing was carried out to reduce the level of losses because fish were not absorbed by the market.

### **Creative entrepreneurs act as mediations that affect production factors on the performance of catfish cultivators.**

Based on the results of the study, it showed that there is a significant influence on the role of creative entrepreneurs as mediation on the performance of catfish cultivators but with a negative coefficient (-0.601). That is, the mediating role of creative entrepreneurship to influence production factors so that performance increases turned out to be a failure because it actually causes a decrease in the performance of catfish cultivators. The results of research and discussions with catfish cultivators stated that the creation or creativity of cultivators on the existing production factors was in the optimum position. The researcher stated that almost all of the creations that had been done on the production factors had no chance to be improved either with the use of seeds, all of them had used superior seeds, new feed formulations were impossible, because they had been made by the factory with tested tests. The use of seed and feed production factors almost costs 60-70% of the total production cost. For the expansion of the pool and the use of labor, it can be done because these resources are still quite available in Padang.

## **5. Conclusions**

Based on the test results using PLS analysis to examine the effect of several variables on the performance of catfish cultivators, the conclusions that the researcher draws are that production factors have a positive and significant effect on creative entrepreneurs and cultivators' performance, creative entrepreneurs have a negative and significant effect on performance and creative entrepreneurs mediate the influence of these factors. Production on the performance of catfish cultivators was negative and significant. This means that the mediating role of creative entrepreneurs fails to influence the production factors so that the increase in the performance of cultivators decreases.

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## **References**

- Amabile, T.M. (1983), *The Social Psychology of Creativity*, Springer-Verlag, New York, NY, Berlin, Heidelberg, Tokyo.
- Asmanah dkk. 2009. "Faktor-Faktor Yang Mempengaruhi Produksi Perikanan Budidaya Di Jawa Tengah." [http://pustaka.unpad.ac.id/wpcontent/uploads/2012/12/pustaka\\_unpad\\_faktorfaktor\\_yang-mempengaruhi.pdf](http://pustaka.unpad.ac.id/wpcontent/uploads/2012/12/pustaka_unpad_faktorfaktor_yang-mempengaruhi.pdf).
- Augusty, F. (2000). *Manajemen Pemasaran : Sebuah Pendekatan Strategik*, Research Paper Series. Seri Penelitian Manajemen.
- Bridge, S., O'Neill, K., and Cromie, S. (2003). *Understanding enterprise, entrepreneurship and small business* (2nd ed.). Basingstoke: MacMillan Press Ltd.

- Chaudhry, Azam Amjad. 2009. Total Factor Productivity Growth in Pakistan: An Analysis of the Agricultural and Manufacturing Sectors. *The Lahore Journal of Economics* 14: SE (September 2009): pp. 1-16.
- Dinas Kelautan dan Perikanan Kota Padang, 2020. Data produksi dan statistic kelautan dan perikanan Kota Padang. 1-38.
- Gaol, CHR. Jimmy L. "A to Z Human Capital. (2014). *Manajemen Sumber Daya Manusia. Konsep, Teori, Dan Pengembangan Dalam Konteks Organisasi Public dan Bisnis*". Jakarta: PT. Gramedia Widiasarana.
- Gaspersz, J.B.R. (2005), "Compete with creativity", Essay presented at the innovation lecture "Compete with creativity" of the Dutch Ministry of Economic Affairs, The Hague.
- Ghozali, I.2008. *Structural Equation Modeling Teori Konsep Dan Aplikasi*. Semarang :Badan Penerbit Undip.
- Gibson, 2017. *Organization, Behavior, Structure & Process*, edition 10. Boston. USA.
- Gomes, Faustino Cardoso. 2003. *Manajemen Sumber Daya Manusia*. Jakarta: Andi Offset.
- Gunawan, Imam. 2018. "Metode Penelitian Kualitatif Teori dan Praktik", Jakarta: Bumi Aksara.
- Hasibuan. 2013. *Manajemen Sumber Daya Manusia*. Cetakan Ketujuh Belas. Jakarta: PT. Bumi Aksara
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135–172
- Mahsaiba, Izzatul Dwina, dkk. 2013 „" Analisis Finansial Usahatani Ikan Lele Dumbo. Tersedia di: <http://download.portalgaruda.org/article.php?article=184272&val=4143&title>.
- Mangkunegara, A.A.A.P. (2010). *Manajemen Sumber daya Manusia perusahaan*. Bandung: PT Remaja Rosdakarya.
- Manurung, Debbie Febrina, dkk. 2014. "Analisis Optimalisasi Penggunaan Input Pada Usaha Budidaya Perikanan (studi kasus : Kota Tanjung Balai)" Tersedia di: <http://jurnal.usu.ac.id/index.php/ceress/article/view/8080>.
- Negara, A.A.N.B.S, N. D. Setiawina, dan M. H. U. Dewi (2017). Faktor-faktor yang mempengaruhi produksi budidaya ikan lele di Kota Denpasar. *E-Jurnal Ekonomi dan Bisnis Universitas Udayana* 6.2: 755-788.
- Novriadi, Romi. 2013. "Pentingnya Teknologi Untuk Pembangunan Perikanan. Tersedia di : [http://www.kompasiana.com/romibatam/pentingnya-teknologi-untuk-pembangunan-perikan\\_an\\_552fd5cd6ea834e64a8b4585](http://www.kompasiana.com/romibatam/pentingnya-teknologi-untuk-pembangunan-perikan_an_552fd5cd6ea834e64a8b4585).
- Pretorius, M., Millard, S. M., & Kruger, M. E. (2005). Creativity, innovation and implementation: Management experience, venture size, life cycle stage, race and gender as moderators. *South African Journal of Business Management*, 36(4), 55–68
- Rinaldi, dkk. 2014. "Analisis Perkembangan Produksi Perikanan Budidaya di Kabupaten Rokan Hulu Provinsi Riau" Tersedia di: <http://jom.unri.ac.id/index.php/JOMFAPERIKA/article/view/3763>
- Rivai, Veithzal. 2011, *Manajemen Sumber Daya Manusia untuk Perusahaan: dari Teori ke Praktik*, Jakarta : RajaGrafindo Persada
- Robbin and Judge. 2015. *Perilaku Organisasi Edisi 16*. Jakarta. Salemba Empat.
- Sedarmayanti. 2017. *Manajemen Sumber Daya Manusia*. Bandung: Refika Aditama.
- Sinambela, Lijan Poltak. 2012. *Kinerja Pegawai*. Graha Ilmu: Yogyakarta.
- Slater, S. F., and Narver, J. C. (1994). Does competitive environment moderate the market orientation-performance relationship?, *Journal of Marketing*, Vol. 58(1): 46-55.
- Sofyan, H (2008) *Teori Akuntansi*. Kencana Prenada Media Group, Jakarta.
- Tajerin. 2007. "Efisiensi Teknis Usaha Budidaya Pembesaran Ikan Lele di Kolam di Kabupaten Tulung Agung".

- Utami, Rizki dkk. 2014. “Analisis Faktor-Faktor Yang Mempengaruhi Tambak Udang Sistem Ekstensif Dan Sistem Intensif Studi Kasus di Kecamatan Secanggang Kabupaten Langkat”.
- Wibowo . (2014) . Manajemen Kinerja . Edisi Keempat . Jakarta : Rajawali Pers.
- Widodo, J. & Suadi. (2006). Pengelolaan Sumberdaya Perikanan Laut. Yogyakarta, ID: Gadjah Mada University Press.
- Wirawan. (2009). Evaluasi Kinerja Sumber Daya Manusia Teori Aplikasi dan Penelitian. Jakarta. Penerbit: Salemba Empat.
- Wang, A. 2014. “The impact of quality of labor on farmers' agricultural production benefits: A case study of anyang city. Asian Agricultural Researc”, 6(4), 120-123. Tersedia di: <http://search.proquest.com/docview/1553512740?accountid=32506>.
- Zhou, et al, 2005, The Effect of Strategic Orientations on Technology and Market Based Breakthrough Innovations, Journal of Marketing, Vol.69, pp.42-60.