

THE INFLUENCE OF ENVIRONMENT AND ENTREPRENEURSHIP TOWARD FARMING PERFORMANCE IN SLEMAN REGENCY, INDONESIA

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Abstract

Entrepreneurship was the ability to create and provide value-added products by applying an efficient way of working, through the courage to take risks, creativity and innovation and the ability of management to seek and discuss opportunities. The objectives of this research were to determine the effect of internal and external environment on the entrepreneurial spirit and its impact on performance in Sleman District. Comprehending 150 respondents and using *Structural Equation Modelling* (SEM), mix methods were applied in this research. The research result showed that there was a direct influence between Internal Environment to Entrepreneurial spirit, obtainable the value of *inner loading* coefficient equal to 0.586, the direct influence between External Environment to Entrepreneurial spirit, attainable the value of *inner loading* coefficient equal to 0.402, and direct influence between Entrepreneurial spirit on Farming Performance, the value of *inner loading* coefficient was 0.379, with *p-value* <0.001.

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INTRODUCTION

Farmer entrepreneurship was very important as a new approach to improve farming performance, among others based on the characteristics of entrepreneurship. Entrepreneurship was the ability to create and provide value-added products by applying efficient workings, through the courage to take risks, creativity and innovation and the ability of management to seek and discuss opportunities (Daryanto in Nurdiani, 2013). These days, there was no doubt that entrepreneurship could not be separated from human resources where the human resources exist in an activity or organization, furthermore when more complex challenges experienced. Of course, it needed support from farmers as farming actor in improving farm income.

Facing the increasing fierce business competition, the entrepreneurial spirit needed to be nurtured and developed, the presence of fish entrepreneurs was related to their role in organizational life that will experience growth. The linkage of entrepreneurs to the organization led to individual performance within the organization, including entrepreneur-led leadership, to influence overall organizational performance (Nangoi 1992 in Hastuti 2002). To increase fish farm income each fish farmer had entrepreneurship potency that can influence the improvement of farming performance although on a different level.

Entrepreneurship was a study that examines the development and building of the spirit of creativity and dared to endure the risk to realize an attainment (Fahmi, 2013). The courage to shouldered risks belongs to an entrepreneur because entrepreneur was required to be courageous and ready if those entrepreneurs did retain no market attention value, and this should be seen as a form of a process towards true entrepreneurs. According to Joseph Schumpeter, " *Entrepreneur as the person who destroys the existing economic order by introduction and services, by creating new forms of organization, or by exploiting new raw materials* ". (Bygrave, 1994 in Alma, 2013). Mostly the failure and success of farming was influenced by how much the farmers' ability to manage and create the controlled production factors into a profitable business and business sustainability. That ability was an entrepreneurial skill. Hisrich and Peters (1992) defined entrepreneurship as a dynamic process and always influenced by environmental factors. Priyanto (2008) stated that farmers' entrepreneurship needs to be grown continually to deal with unfavorable market environment pressures.

The main commodities of fish cultivated by *Pokdakan* in Sleman Regency are respectively catfish, Nile tilapia, carp, pomfret fish and iridescent shark and goldfish, Java carp, and tilapia fish in small quantities. The commodity was selected to be studied was Nile tilapia. As the increasing number of *pokdakan*, the production of aquaculture and seed fisheries also increased. To improve the fish group performance, the institutional role of farmer groups needed, whether it was for beginners, intermediate, or primary.

There was one aspect that was expected by the fishery business in Sleman regency which could be leveraged for the growth of fishery development, which was embedded entrepreneurial spirit for business actors, namely people who have willingness and ability proactively trying to solve the problems faced by promoting innovation and creativity. The fishery resources owned by Sleman Regency were a huge asset opportunity for economic empowerment of rural communities should be developed continuously.

HYPOTHESES

Everyone had a potential entrepreneurial spirit that could drive to increase income, therefore each on a different level. Someone who has a high potential entrepreneurial spirit was expected to increase farm income through the fish farming performance. Based on those explanations, the hypotheses to be studied was how the internal environment, external and entrepreneurial spirit influence on performance in Sleman regency?

RESEARCH OBJECTIVES

This study aimed to determine the influence of internal environment, external and entrepreneurial spirit on work performance in Sleman District.

RESEARCH METHODOLOGY

The method *mixed methods*, those were a research approach that combines or associate qualitative and quantitative forms, has been used in this research. This study was a research which combining two forms of research that had been existed, those were qualitative research and quantitative research (Creswell, 2015).

The research was conducted in Sleman Regency which was the center of freshwater fish production. Ngemplak and Cangkringan sub-districts selection based on group rank (beginner, intermediate, primary) were selected purposively. The study was conducted from July to December 2016.

The respondent of farmer group was determined by a purposive method that was determining the respondent according to the purpose of research, (Sugiyono, 2012) that was farmer group of fish farmer based on beginner, intermediate, primary class classification from a total of 150 people.

Data Analysis used in this research was to know the influence of institutional, social capital, and entrepreneurship to farming performance which used two approaches that are qualitative and quantitative analysis. Qualitative descriptive used quantitative tools help the score. Scoring by using *Likert Scale* with Likert scale 5 (five) scores of penelian those were 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree. The model used in this research was the causality or causality model in the form of structural equation (*Structural Equation Model/SEM*). Data processing to find SEM equations, using AMOS 16 *software*.

RESULTS AND DISCUSSION

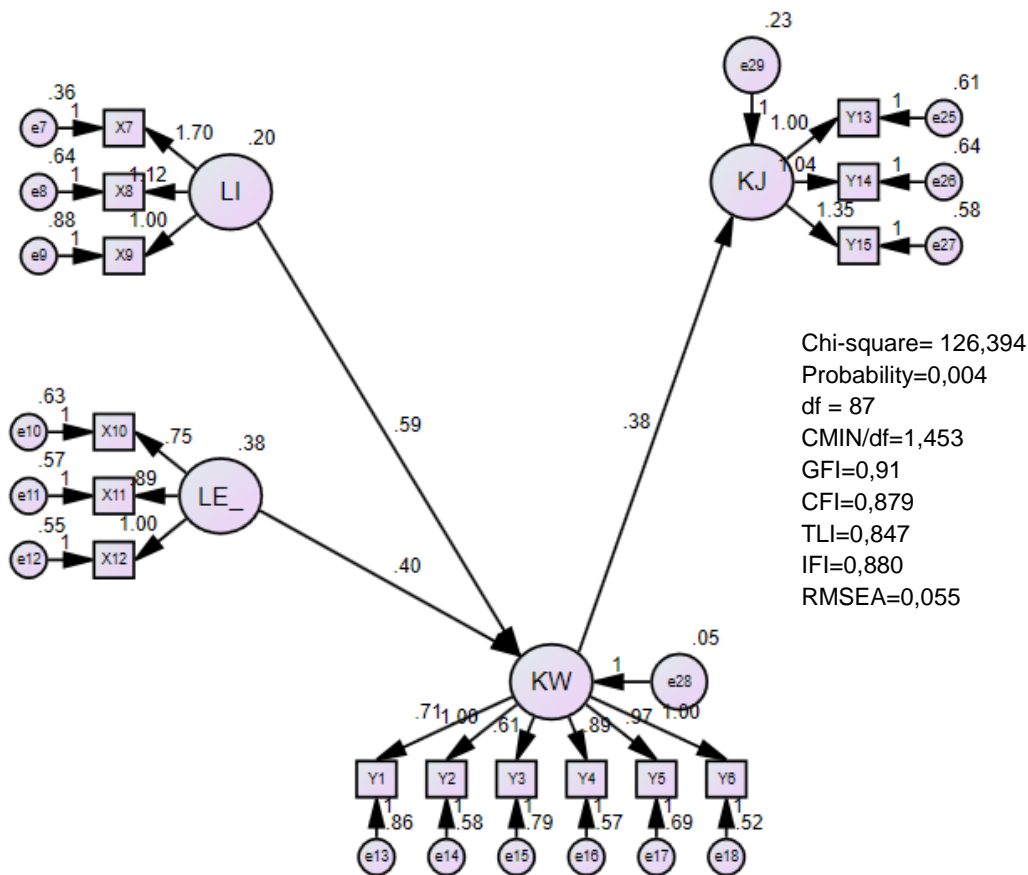


Figure 1. SEM Reseach Model

The result of *Goodness of Fit Overall* test based on Figure 1 and Table 1 showed that from 3 criteria of CMIN / DF, RMSEA, and GFI pictured as a good model. Meanwhile, Chi-Square, p-value, AGFI, TLI, and CFI showed marginal model. According to Arbuckle and Wothke, in Solimun (2009), the best criteria were used as a good model indication was the p-value was more than 0.05, Chi-Square / DF was less than 2, GFI was more than 0.90, AGFI was more than 0.90, TLI over 0.95, CFI was more than 0.95, and RMSEA at less than 0.08. In this study, the values of CMIN / DF and RMSEA have met the *cut off* value. Hence the SEM model in this study was suitable and feasible to be used, so that interpretation could be done for further discussion.

Table 1. SEM Analysis Model

		Estimate	S.E.	C.R.	P
KW	<--- LI	.586	.182	3.224	.001
KW	<--- LE_	.402	.120	3.367	***
KJ	<--- KW	.379	.170	2.225	.026
Y13	<--- KJ	1.000			
Y14	<--- KJ	1.044	.270	3.864	***
Y15	<--- KJ	1.353	.361	3.750	***
Y6	<--- KW	1.000			
Y5	<--- KW	.968	.260	3.726	***
Y4	<--- KW	.891	.237	3.752	***
Y3	<--- KW	.608	.231	2.632	.008
Y2	<--- KW	.998	.253	3.937	***
Y1	<--- KW	.709	.247	2.865	.004
X9	<--- LI	1.000			
X8	<--- LI	1.121	.296	3.793	***
X7	<--- LI	1.705	.447	3.813	***
X12	<--- LE_	1.000			
X11	<--- LE_	.892	.211	4.233	***
X10	<--- LE_	.750	.187	4.006	***

Source: data processed, 2017

Outer Model

Entrepreneurial spirit Variable

Based on Table 5.16 and Figure 5.12, the first indicator of the Entrepreneurial spirit variable was Optimistic (Y1), the *loading factor* value was 0.709, with 0.004 *p-values*. Because *p-value* < 0.05, it could be concluded that the Optimistic indicator (Y1) measured the variable of Entrepreneurial Spirit significantly. Considering the coefficient marked positive (0.709) indicated the higher the optimistic value, the higher the Entrepreneurial spirit.

In the second indicator of the Soul Entrepreneurship variable, namely Responsibility (Y2), the *loading factor* value was 0.998, with *p-value* <0.001. Because *p-value* <0.05, it could be concluded that the Indicator of Responsibility (Y2) measures the variable of Entrepreneurial spirit significantly. Considering the coefficient marked positive (0.998) indicated the higher the value of responsibility, the higher the Entrepreneurial spirit.

In the third indicator of the Entrepreneurial spirit variable was Hard work (Y3), the *loading factor* value was 0.608 with a *p-value* of 0.008. Because of *p-value* <0.05, it could be concluded that the indicator Hard work (Y3) significant measure the variable of Entrepreneurial Spirit. Considering the coefficient positive marked (0.608) indicated the higher the value of hard work, the higher the Entrepreneurial spirit.

In the fourth indicator of the Entrepreneurial spirit variable, Creativity Innovation (Y4), the *loading factor* value was 0.891, with *p-value* <0.001. Because *p-value* <0.05, it could be concluded that the indicator Innovation creativity (Y4) measure the variable of Entrepreneurial spirit significantly. Considering the coefficient marked positive (0.891) indicated the higher the value of creative innovation, the higher the Entrepreneurial spirit was.

In the fifth indicator of the Entrepreneurial spirit variable (η_1) ie Dare to take risks (Y5), the *loading factor* value was 0.968, with *p-value* <0.001. Because *p-* On the sixth indicator of the Entrepreneurial spirit variable (η_1) ie Decision Making (Y6), the *loading factor* value was 1,000, with *p-value* <0.001. Because *p-value* <0.05, it could be concluded that indicator Decision making (Y6) significant measured variable of Entrepreneurial spirit. Considering the coefficient marked positive (1,000) indicated the higher decision-making, the higher the Entrepreneurial spirit.

The *value* <0.05, it could be concluded that the indicator Dare to take risks (Y5) significant measured the variable of Entrepreneurial Spirit. Considering the positive coefficient (0.968) indicated the higher the dare to take risks, the higher the Entrepreneurial spirit.

Out of the six indicators of the Entrepreneurial Spirit variable, the first indicator has the highest *loading factor* value i.e. Decision Making (Y6) was the most dominant indicator of the measure

of the Entrepreneurial Spirit variable. This showed that the Entrepreneurial Spirit variable was high mainly due to decision-making indicator.

Internal Environment Variables

In the first indicator of Internal Environment variable that was Interest (X7), *loading factor* value is 1,705, with *p-value* equal to <0.001 . Because *p-value* <0.05 , it can be concluded that the Interest indicator (X7) measured the Internal Environment variable significantly. Considering the coefficient marked positive (1.705) indicated the higher the value of interest, the higher the Internal Environment.

In the second indicator of Internal Environment variable that was Ability (X8), *loading factor* value equal to 1,121, with *p-value* equal to <0.001 . Because *p-value* <0.05 , it can be concluded that the Ability Indicator (X8) measured the Internal Environment variable significantly. Considering the positive marked coefficient (1.121) indicated the higher the value of ability, the higher the Internal Environment.

At the third indicator from variable Internal Environment was Family support (X9), the score of loading factor as big as 1.000 by *p-value* <0.001 . Because of *p-value* <0.05 , so that can be concluded that indicator Family support (X9) was significant to measure variable Internal Environment. Considering coefficient has a positive mark (1.000) it indicated the higher Family support value, the higher Internal Environment was.

Out of three indicators of variable Internal Environment, the first indicator had the highest score of loading factor is the interest (X7) which one the most dominant indicator to measure variable Internal Environment. This matter indicated that variable Internal Environment is primarily high because of indicator interest.

External Environment Variable

At first indicator from variable External Environment was Price fixing (X10), the score of loading factor as big as 0.750, by *p-value* <0.001 . Because of *p-value* <0.05 , so inferential that indicator Price fixing (X10) was significance to measure variable External Environment.

Considering coefficient has a positive mark (0.750) it indicated the higher Price fixing value, the higher External Environment.

The second indicator from the variable external environment was Agro climate state (X11), a score of loading factor as big as 0.892, by p-value <0.001. Because of p-value <0.05, so that can be concluded that indicator Agro-climate state (X11) was significance to measure variable External Environment. Considering coefficient has a positive mark (0.892) it indicated the higher Agro-climate state value, the higher External Environment.

The third indicator from variable External Environment was Surrounding environment support (X12), the score of loading factor as big as 1.000 by p-value <0.001. Because of p-value <0.05, so inferential that indicator Surrounding environment support (X12) was significance to measure variable External Environment. Considering coefficient has a positive mark (1.000) it indicated the higher Surrounding environment support value, the higher External Environment.

Out of three indicators of variable External Environment, the third indicator has the highest score of loading factor was surrounding environment support that was the most dominant indicator to measure variable External Environment become primarily high because indicator Surrounding environment support.

Farm-business Performance Variable

At first indicator from performance variable, Farm business was Profit (Y13), score of loading factor as big as 1.000, by p-value <0.001. Because of p-value <0.05, so inferential that indicator of Profit (Y13) was significance to measure Farm-business Performance variable. Considering coefficient has a positive mark (1.000) it indicated the higher profit value, the higher Farm-business performance.

The second indicator from performance variable, Farm business was Income (Y14), the score of loading factor as big as 1.044, by p-value <0.001. Because of p-value <0.05, so inferential that indicator of Income (Y14) was significance to measure Farm-business Performance variable. Considering coefficient has a positive mark (1.044) it indicated the higher Income value, the higher Farm-business Performance was.

The third indicator from variable Farm-business Performance was feasibility of farming (Y15), the score of loading factor as big as 1.353 by p-value <0.001. Because of p-value <0.05, so inferential that indicator feasibility of farming (Y15) was significance to measure variable Farm-business Performance. Considering coefficient has the positive mark (1.353) it indicated the higher feasibility of farming value, the higher Farm-business Performance.

Out of three variable Farm-business Performance indicators, the third indicator has the highest score of loading factor was feasibility of farming (Y15) that was the most dominant indicator to measure variable Farm-business Performance. This matter indicated that variable Farm-business Performance become primarily high because of indicator feasibility of farming.

Table 2. Inner Model of Analysis SEM

Correspondence	Line	Coefficient	p-value	Explanation
Internal Environment →	0.586	0.001	Significant	Entrepreneurial Spirit
External Environment →	0.402	<0.001*	Significant	Entrepreneurial Spirit
Entrepreneurial Spirit →	0.379	0.026	Significant	Farm-business Performance

Source: processed data, 2017

Based on SEM analysis evaluation, for the trial of direct effect on Internal Environment towards Entrepreneurial spirit, was acquired a coefficient score of inner loading as big as 0.586, by p-value 0.001. Because of p-value <0.05, so there was a direct effect significantly between Internal Environment towards Entrepreneurial spirit. Considering coefficient of inner loading has the positive mark, it was indicating both of them correspondence was positive. It meant, the higher Internal Environment, it will result in the higher Entrepreneurial spirit. In the trial of direct effect on External Environment towards Entrepreneurial spirit, was obtained a coefficient score of inner loading as big as 0.402, by p-value <0.001. Because p-value <0.05, so there was direct effect significantly between External Environment towards Entrepreneurial spirit. Considering coefficient of inner loading had a positive mark, it indicated that connection between two of them was positive, it meant the higher External Environment, would make the higher

Entrepreneurial spirit. This matter in line with Darmadji's research (2012), social court and economy factor have had an effect towards chili farmer's business, whereas economy court and physical factor towards rice farmer.

From the direct effect trial on Entrepreneurial spirit towards Farm-business performance, was attained a coefficient score of inner loading as big as 0.379, by p-value <0.001 . Because of p-value <0.05 , so there was direct effect significantly between Entrepreneurial spirit towards Farm-business performance. Considering coefficient of inner loading had the positive mark, it indicated the conformity between two of them were positive. It meant, the higher Entrepreneurial spirit, would make the higher farm-business performance. In line with Harmain (2011) competence of entrepreneur affected towards works.

These results were in line with Nurdiani's research (2013). According to Nurdiani, the business level of red onion farmer in Bantul regency was high with overall average percentage reach 70,87%. An individual environment, physical environment, social, economic, and institutional factors made positive effected and significant towards farm-business performance. The factor had the biggest positive effect was an individual factor and then followed by institutional environment. Physical environment and economy had influence coextensively, whereas the least effect was a social environment. Farmer's business activities bestowed a positive effect upon farm-business performance and had a key position in the mediation of influence individual factor and environment towards Farm-business performance. The outcome provided proof the thought that farmer's entrepreneurship was something which could be grown and could be considered in order to be a new approach in the upgrading Farm-business performance.

Sadjudi (2009) did a research on entrepreneurship influence towards tobacco farm-business performance at Gantiwarno sub-district, Klaten regency, utilizing factor analysis, line analysis model, and regression analysis model. The correspondence pattern economic environment influence, physical environment, individual aspect, and entrepreneurship towards tobacco farm-business performance would offer more benefit if these were derived from multiple analysis models with the variable moderate influence of entrepreneurship behavior. Tobacco farmer's courage to shouldered failure risk within to discover technical and new technology was

moderated by its' individual's behavior. A precise and beneficial policy in price-fixing were very influenced by economic condition, effortless to obtain fund or capital, healthy business competition and being supported by excise tax, nicotine, and also support from the tobacco industry.

CONCLUSION AND IMPLICATION

This research conclusion was there was the direct effect on Internal Environment towards Entrepreneurial spirit, it was obtained a 0.586 coefficient score of inner loading, by p-value 0.001. Because of p-value <0.05, so there was a direct effect which significant between Internal Environment towards Entrepreneurial spirit. Considering coefficient of inner loading had a positive mark, it indicated that the correspondence between both of them was positive. It meant the higher Internal Environment, the higher Entrepreneurial spirit. At direct effect trial between External Environment towards Entrepreneurial spirit, it was obtained a 0.402 coefficient score of inner loading, by p-value <0.001. Because of p-value <0.05, so there was a significant direct effect between External Environment towards Entrepreneurial spirit. Considering inner loading coefficient had the positive mark, it indicated that the correlation between the two variables was positive. It meant, the higher External Environment, would result in the higher Entrepreneurial spirit. At direct effect trial between Entrepreneurial spirit towards Farm-business performance, it was obtained a coefficient score of inner loading 0.379, by p-value <0.001. Because of p-value <0.05, so there was a significant direct effect between Entrepreneurial spirit towards Farm-business performance. Considering a positive inner loading coefficient, it indicated that correspondence between both variables was positive. It meant the higher Entrepreneurial spirit, the higher Farm-business performance was.

The implication of this research fish-farmer Entrepreneurial spirit could be justifiable to become a new alternative approach to increase Farm-business performance. With its Internal Environment and External Environment existence about to influence Entrepreneurial spirit so that Farm-business performance could be increased. SEM analysis was used to become one of the models to formulate the correspondence between Internal Environment, External Environment, Entrepreneurial spirit, and Farm-business performance.

BIBLIOGRAPHY

- Alma, B. 2013. *Kewirausahaan (Entrepreneurship)*. Alfabeta. Bandung
- Creswell, John W. 2015. *Research Design Qualitative, Quantitative, dan Mixed Approach*. Pustaka Pelajar. Yogyakarta
- Darmadji. 2012. *Kewirausahaan Petani dan Kinerja Usahatani Cabe dan Padi di Kabupaten Sleman (Farmer's entrepreneurship and chili ,rice farm performance in Sleman District)*. Agriculture Economic Dissertation. Post graduate school of Gadjah Mada University. Yogyakarta.
- Fahmi. 2013. *Kewirausahaan (Entrepreneurship)*. Alfabeta. Bandung
- Ghozali, I. 2005. *Structure Equational Modeling, Teori, Konsep, dan Aplikasi dengan Program Lisrel 8.54 (Structure Equational Modeling, Theory, Concept, dan Program Lisrel 8.54 application)*. UNDIP. Semarang
- Harmain, U. 2011. kinerja usaha *entrepreneur* perempuan di Daerah Istimewa Yogyakarta. (*Women entrepreneur performance in Special Region of Yogyakarta Province*). UGM dissertation. Yogyakarta
- Hastuti. Diah Retno Dwi. 2002. kinerja usaha *entrepreneur* perempuan di Daerah Istimewa Yogyakarta. (*The Influence of entrepreneurial spirit potency Towards furniture company employee performance in CV Alisha Gallery Surakarta*). Thesis MMA.UGM.Yogyakarta
- Hisrich, RD. and Michael P. Peters. 1992. *Entrepreneurship, Starting, Developing, and Managing a New Enterprise* 2nd edition. Irwin. The USA.
- Nurdiani, Ulfah. 2013. Kewirausahaan Petani dan Kinerja Usaha tani Bawang Merah di Kabupaten Bantul (*Farmer's Entrepreneurship and onion farm performance in Bantul district*). Thesis. UGM. Yogyakarta
- Priyanto, Sony Heru, 2004. Pengaruh Faktor Lingkungan, Kewirausahaan dan Kapasitas Manajemen Pada Petani Tembakau di Jawa Tengah (*The influence of environmental factors, entrepreneurship dan management capacity towards tobacco farmers in Central Java*). Dissertation. Economic graduate program of Brawijaya University, Malang.
- Riduwan, 2002. *Skala Pengukuran Variabel-Variabel Penelitian (Research variables measurements scale)*. IKAPI. Jawa Barat

- Sadjudi.2009. *Pengaruh Kewirausahaan Terhadap Kinerja Usaha Tani Tembakau di Kecamatan Ganti warno Kabupaten Karo (The influence of Entrepreneurship towards Tobacco farm Performance in Ganti warno, Karo district)*. *Management Application Journal* volume 7 number 2
- Solimun.2003. *Permodelan Persamaan Struktural Berbasis SEM (SEM based structural equation model)*, UM Press Malang
- Sugiyono. 2012. *Statistika untuk Penelitian (Statistic for research)*. Alfa Beta. Bandung