

Entrepreneurial Quality of Small Scale (SMEs) Broiler Farming with Independent Business Model in Maros District of South Sulawesi Province, Indonesia

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Abstract

This study uses the theory of entrepreneurship to develop a conceptual basis in order to analyze the entrepreneurial quality level of farmers who are engaged in Maros District, South Sulawesi (Indonesia). Thirty broiler farmers in the center area of broiler production in Maros District, including Simbang, Bantimurung and Tanralili Sub-Districts, were chosen as a sample with a purposive sampling method based on the criteria of having the scale of farm business less than 4000 head per cycle period and having had at least two years experience in the broiler industry. Data were collected through interviews with respondents, farmer questionnaires, and observation techniques. Data collected were analyzed using descriptive analysis in the form of tabulations. The results of the study showed that the level of entrepreneurial quality of farmers with independent broiler farm business models are included in the high category. Attributes of entrepreneurship that make a big contribution to the high level of entrepreneurial quality are innovation and creativity, achievement orientation, self-confidence, and connect with others.

Key words: quality of entrepreneurship, attribute of entrepreneurship, independent broiler farm business

Introduction

Broiler production is one of the most important components of the livestock sector in Indonesia, due to its contribution to national meat production, and can be a main source of family income or can provide subsidiary income and gainful employment to farmers throughout the year. Broiler raising is relatively new to Indonesia, which began in the 1970s through the Bimas program. The rapid increase in broiler meat production has even outnumbered beef production in 1990, in which beef production only increased to 259.2 thousand tons, while broiler meat surpassed beef with production of 261.4 thousand tons (Tangendjaja and Sudjana, 1999). Changing roles in the contribution of the dominant national meat from beef to broiler meat has been promoted by government policy to improve efficiency of broiler production and programs directed at providing a greater opportunity to investors (big enterprises) to invest in the off-farm upstream (chick hatcheries and feed manufacturing) and off-farm or downstream processing (cutting, processing, and marketing) as well as inputs, whereas broiler farmers are engaged in farm activity with the inputs supplied by the investor.

Although broiler production can be located in most of Indonesia's archipelagos, the major provinces to raise broilers have been concentrated on South Sulawesi and Jawa. This is probably related to the supply of raw materials for feeds and the proximity to markets. According to data from the Central Bureau of Statistics, the broiler population in South Sulawesi during 2009-2010 was 15,031,116 head with an annual growth rate of approximately 5.0 percent (Central Bureau of Statistics, 2011). In South Sulawesi, the central areas of broiler production are in Maros District and the other Sidenreng Rappang and Gowa Districts. Broiler population in Maros District was 7,982,504 head, and small-scale broiler farms (SMEs) account for more than 98% of all broiler farming. Managed by farmers with a scale of production less than 4000 birds per cycle production (Bureau of Statistics of South Sulawesi, 2011).

Broiler farm business in the Maros District conducted in 2 (two) model business, namely Independent and Partnership models. Independent model operation, farmer handles all kinds of activities and input provisions (feed, birds, and medicine) and is free to buy and sell inputs and outputs. While the Partnership model operation, farmers carry out business in collaborating with large enterprise (Firm Core), commonly known as Core-Plasma partnership pattern. Farmer or plasma provide cages, equipment and labor while inputs (feed, birds, and medicine) are supplied by the enterprise or core/nucleus, and the enterprise buys the output (Maros Livestock Services, 2010). In theory, a nucleus-plasma pattern can provide a more profit or revenue than establishment of single farm on the same scale, because through the partnership, farmers have skillful in management and technical, their farm business risk reduced, their farm business productivity and efficiency improved (Wickins and O'C Lee, 2002). In fact, Sumarni (2008) and Yunus (2009) reported from their empirical research that although the farmers with partnership model are skillful in technical aspects, but they had lower profit than the farmers with independent model. Based on twice cycle of production with the amount of chicken reared 500 head, the average total cost production of farmer plasma was I 87.361.363 IDR and get incomes 5.898.847 IDR (R /C ratio: 1.07), while an average total cost production of farmer with independent model was 73,762,298 IDR and gained income 7.394.537 IDR (R /C ratio of 1.10).

Despite the many of research concerning the small scale of broiler farm business with independent model, surprisingly very little attention has been paid to the question: how small scale of broiler farm business with independent model, mainly are in Maros District that lack of capital and skill being able to survive and possibility to growth in the monopolistic and very volatile markets? According to Gibs (2005), the capacity of a firm to survive and grow in uncertainty and complexity is fundamentally related to its entrepreneurial quality. Then, the phenomenon is suspected that farmers are engaged in independent of broiler farm business model have entrepreneurship quality which is found in successful entrepreneurs, so they can use production factors efficiently and create a greater profits. Based on the phenomenon, the problem in this study is how the entrepreneurial quality of farmers engaged in independent broiler farm business model at Maros District. Based on the formulation of research problems, the purpose of this study is to analyze the entrepreneurial quality of farmers engaged in independent broiler farm business model at Maros District.

Literature Review

1. Advantage and Disadvantage to Broiler Farming Business Model In theory at least, the farm partnership model offer advantages :

(a) Economic, Farm partnerships can be a means to capture these increased returns. Entering a partnership offers farmers these increased returns through: the ability to achieve scale at a lower capital cost; the reduction of costs, which are duplicated between farmers; and risk sharing; (b) Skills, farm partnerships is the possibility of sharing best farming and business management practice. Collaboration and partnership among farms can lead to management synergy, especially in instances of collaboration between farmers coming from two different enterprise backgrounds. One of the benefits from two spouses working in a partnership arises from the combining of different skill sets to improve the performance of existing enterprises and the possibility of diversifying into alternative enterprises with income generating potential; (c) Socials, Joint farming ventures can help to address the social challenge of the 'one man farm' model making farming a more attractive occupation. Joint farming ventures can help socially through: reducing isolation: improving work-life balance; helping to address problems of succession and gender inequality; pooling skills and talents of the different individual farmers involved in the joint farming venture; and helping to overcome setbacks such as injury and sickness (Anonimus, 2011).

According to Saptana dan Ashari (2007), broiler farming partnership are performed in Indonesia including five patterns, namely : 1) The core-plasma partnership, 2) contract farming partnership, 3) subcontracting farming partnerships, 4) trade and agency partnership, and 5) operational agribusiness partnership. For all of the business partnerships, which implemented in the broiler farm business is only the core-plasma partnership.

Ideally core-plasma partnership are profitable for farmer. However, many farmers are not interested in joining the partnership and choose to do business independently with the reason that independently more profitable than the farmers who are partnered (Sarwanto, 2004). Studies are conducted to compare the profitability of partnerships and independent models are still give the controversy in results.

Herianto (2009) studied on chicken performance production and income of broiler farming partnership in Gresik District, East Java and found that mortality of broiler chickens in partnership model reached 4.8%, while in independent model 4.1%; weight average of broiler output in partnerships model was 1.9 kg, while the independent model 2.8 kg; feed conversion rate of chicken in partnership model reached 1.44 while independent model 1.48. His analyzed on farmer income with the same of broiler raising scale (1,000 heads per cycle), farmer in partnership model gained income 3,284,939 IDR, while the independent model gained 10.837.210 IDR. The same result reported by Yunus (2009) studying production efficiency of broiler partnership and Independent model in Palu, Central Sulawesi and found that farmer in independent model have higher income level compare with farmer in partnership model, it is showed with R/C ratio value of independent model was 1.26 higher compare with partnership model with ratio value 1.06. Then, her analyzed on price/allocation efficiency of both partnership and independent models shows that both partnership and independent model are not economically efficient. On the other hand, Suwarta (2012) studied productivity farm business in both partnership and independent model on broiler farm in Sleman District, Yogyakarta and concluded that productivity of farm business in partnership models was greater than the independent model. Its supported by Unang (2003) studied profitability and efficiency of partnerships and independent models on broiler farms in Tasikmalaya District, West Java, and found that both partnership and independent mode were privately and socially profitable, but the partnerships model gives better profitability and greater efficiency compared with the independent model.

There are several factors that might explain why farmers in the partnership model are not be able to optimize their profit. First, farmers generally have a high degree of dependence to the company's core in terms of production inputs and marketing output. Its caused farmers lack of creativity and innovation ability in managing factor production efficiently. Second, Low bargaining power of the farmer. Farmers lacks powerness in controlling the quality of the purchased input and core enterprise sometimes lacks transparency in the determination of input prices and output (determined unilaterally by the core company). Third, farmers have no motivation for growing their farm business, they have limited opportunity to growth. New building and expansion are dictated by core enterprises' plans (Suwarta, 2003). Contrary to the independent model, there are some drawbacks and limitations attached to the farmers include limited capital, and market access. Within this limitation, farmer the farmer must develop their creativity and innovation ability to capitalize on market opportunities and combining the use of production factors efficiently to prevent loss. In addition, farmer have strong motivation for growing their farm business because decision-making include when to start and develop farm business, and all benefits and risks are borne entirely by the farmer (Supriyatna et al., 2006).

2. The Quality of Entrepreneurship

Small-scale farmers are entrepreneurs, then they necessary to develop their entrepreneurial quality to run the farm business, and to be successful an competitive market environment. The attributes of entrepreneurial quality, such as willing to take risks, have the confidence (locus of control) (Hisrich and Peters, 1995), achievement-oriented (Kuriloff et al, 1993; Steinhoff and Burger, 1993), relating to others (admit the importance of business relationships) (Scarborough and Zimmerer, 1991). Many studies have included that entrepreneurial attribute such as risk taking, locus of control,), achievement-oriented and ambiguity tolerance have played an important role in contributing to the business success directly and the business process indirectly (Che Rose, et al., 2006). Studied by Palmarudi (2001) on entrepreneurship quality of small scale of beef processing and preservation firm in Central Java, found that firm be able to survive and growth in economics crisis and high competition conditions because the owner of firms have highly entrepreneurial quality.

Research Methods

In accordance with the context of problem formulation, then the research will be implemented using descriptive research which is a type of research that aims to explain or describe the research problems that occur based on the characteristics of people, namely the entrepreneurial qualities of farmers in implementing independent broiler farm business model. The study population was all farmers in Maros District who doing business of broiler farm with independent model. Number of the farmer that have been registered (listing) in Maros Livestock Services Office in 2010 are as many as 56 farmers who are in Simbang, Bantimurung and Tanralili Sub-District, regional center for broiler production in Maros District. Thirty samples of farmers selected with a purposive sampling method, i.e. taking samples that had been previously determined based on the intent and the purpose of the study. Researchers set two criteria for sampling, which are:

1. Farmers are being sampled is farmer who have small scale of broiler farming business category that is raising less than 4000 head for one of siklus production period, and
2. Farmers are being sampled is a farmer who have had at least two years experience in the broiler industry
Data collected in the form of qualitative data, i.e. data measured in an ordinal scale. Type of data collected is primary data collected through direct interviews with farmers selected respondents as a sample using a questionnaire that has been provided. During the primary data collection, the researcher acted directly to the field as an observation worker, thus allowing a questionnaire filled in the questionnaire completely and can be obtained the data / additional information is not obtained from these questionnaires. In addition, also carried out direct observation of the maintenance activities of farmer respondents, this gives the possibility for researchers to obtain a picture of the object of study deeply and be able to collect information to be more valid and can sharpen the overall analysis. Secondary data obtained from various sources or agencies associated with this study such as: Maros Livestock Services Office, Bureau of Maros Statistical Office, Bureau of Maros Planning Office, and from some previous reports studies which have relevation with this research. The data collected for two months, from June until August 2010.

Methods of Data Analysis

The data that has been collected, analyzed descriptively. Descriptive analysis conducted was in the form of tabulations of the entrepreneurial attribute which consists: (1) The courage in taking the risks, (2) the ability of innovation and creativity, (3) achievement orientation, (4) belief in ourselves, and (5) relationships with others. Based on the value score of each entrepreneurial attributes are owned by respondent farmers, the entrepreneurial quality of the respondent farmers assessed according five group categories, namely very low, low, medium, high, and very high.:

The formula for calculating entrepreneurial quality is:

$$\text{The entrepreneurial Quality} = \frac{\text{Total Score of Farmer Entrepreneurial Attribute}}{\text{The maximum score of Entrepreneurial Attribute}} \times 100\%$$

Operationalization of Variables

The data in this study is a qualitative data so as to avoid errors in measuring the variables, then each variable operational first into indicators and scale, as follows:

1. The qentrepreneurial quality is the entrepreneurial behaviour that must be owned by farmers who carry out independent model to create an advantage in business, with a measurement scale is ordinal.
2. Entrepreneurial behavior is entrepreneurial attribute of the farmers which consists of taking risks, innovating and creativity, achievement-oriented, self-confidence, and connects with other people.
3. Taking risks is the perception of farmers to consider and accept the risks in taking appropriate decisions for their broiler business activities, with a measurement scale is ordinal.
4. Innovation and creativity are the perception of farmers to accept new ideas and use the better way in the activities of broiler farm, with a measurement scale is ordinal.
5. Achievement orientation is the perception of farmers to complete their broiler business activities well for the sake of good quality, with a measurement scale is ordinal.
6. Confidence is farmers to be independent in taking decisions and in conducting their broiler business, with a measurement scale is ordinal.
7. Relationship with others is the perception of farmers to establish and maintain good relationships with people who involved in their broiler business activities, with a measurement scale is ordinal.

Results and Discussion

Small-scale enterprises cannot be separated with the quality of entrepreneurial possessed by the entrepreneur/business owner (Steinhoff and Burger, 1993). Score values of the attributes and the entrepreneurial quality of the respondent farmers are presented in Table 1.

Table 1. Score Value Attribute of Entrepreneurial Conduct and Entrepreneurial Quality of Farmers with Independents Pettern Model In Maros Districft, South Sulawesi

Attribute of Entrepreneurial Conduct	Rating Score
Taking the Risk	18,21
Innovation and Creativity	19,78
Achievement Orientation	25,34
Confidence	19,34
Relationship with Others	20,61
Total	103,28
Entrepreneurial Quality : $103,28 / 138,25 \times 100 : 74,70\%$	

Note:

Assessment criteria: (a): very high, if the value is > 90%, (b) high, if the value is 75-90% (c) if the value is 50-74%, and (d) low, if the value is <49%

The entrepreneurial quality owned by respondent farmers amounted to 74,70 % which means that most farmers who engaged in independent broiler farm business model had a high quality of entrepreneurship (Table 1). The finding of this result provide indication that high of entrepreneurial quality is success factor of small-scale broiler farm with independent model to survive and possibly to grow eventhough in a difficult business environment (i.e monopoly market by big enterprises, lack of government support, and lack of capital). It caused farmers with independent broiler fam business model able creatively and innovatively to manage the limited resources at their disposal in order to anticipate and quickly react to broiler market that very volatile at any time. According to Shane and Venkataraman (2000), successful entrepreneurship, at a firm or individual level, is argued to concern opportunity identification and exploitation. The result of this research supported by Begum (2005) who examined the comparative profitability of poultry production in vertically integrated contract and independent farming systems in Bangladesh studied and found that independent farmer was able to take advantage of the increase in the price of broilers in the market, resulting in a higher price per bird as compared with the contract farmers. Aman et al (2011) emphasized that the quality of entrepreneurship is the most dominant internal factor in contributing to the performance of small-scale enterprises. Researched

Another indication is also very important to expresse from this results is that independent farm business model to be an stimulant factor cause farmer with independent broiler farm business model have the high of entrepreneurial quality. Kuratko et al., (1997) surveyed entrepreneurs from North America to determine what motivation categories lead to business success. Findings from their studies show that independence/autonomy falls into distinct categories motivation of entrepreneurs. Then, to explain the attribute that make big contribution to the high of the entrepreneurial quality of the respondent farmers described in Table 2

Table 2. The Entrepreneurial Attribute of Farmer with Independent Broiler Business Model In Maros District, South Sulawesi

No.	Category	Entrepreneurial Attribute of Farmers				
		Risk	Innovation	Achievement Orientation	Self Confidence	Relationship with Others
1	Very Low	20,25	16,45	13,92	22,79	11,39
2	Low	11,39	12,66	6,33	8,86	7,60
3	Medium	32,91	24,05	24,05	17,72	18,99
4	High	18,99	25,32	32,91	21,52	26,58
5	Very High	16,46	21,52	22,79	29,11	35,44
Total		100	100	100	100	100

Attribute of entrepreneurship in the term of taking risks, many farmers who have the courage to take a high risk (35,45%). Farmers in this group tend to be rather bold conjecture and speculative. The second largest group (32,91%) are farmers who have the courage to take a risk being in the sense of moderate, that they take into account the level of risk to be taken, evaluate the situation carefully and be ready to face any situation that arises, take a decision after the taking the risks first that will occur based on the sources of its knowledge and therefore, this group of farmers like to have hope for greater success in developing their broiler farming businesses.

The last group is a group of farmers who are less willing to take risks (31,64%), a group of farmers who do not have the nature of trial and error and the spirit of adventure, just waiting for a chance to come, always maintain a situation that going through. They therefore need to be given the motivation / knowledge about the need of courage to take moderate risks in taking decision to develop its broiler farm business.

Attribute of entrepreneurship in the term of innovation and creativity, most farmers (46,84%) have the high capability of innovation and creativity. Farmers in this group are always looking for ideas to introduce new products and new production methods, and always responsive to changes in technology, market and business. Therefore, they have the prospects for successfully develop its broiler farm business in the future. The second largest group is the group of farmers who have the capability of innovation and creativity is low (28.11%). Farmers in this group prefer the status quo, do not have and want to find new ideas and closed to renewal, which may be caused by low education or lack of information. They therefore need to be addressed intensively in order to successfully develop their broiler farm business in the future. The last group is a group of farmers who have the medium activity of innovation and creativity (24.05%). Farmers in this group have started to open to renewal and begin to respond the market changes and business. Therefore, farmers in this group still need guidance and counseling on broiler farm bussines and ways of doing broiler rearing tehniiques more advanced.

Attribute of entrepreneurship In terms of achievement orientation, most farmers (55,70%) had a high achievement orientation. The farmer group like this want their broiler farm business achieve the best performance (produce or sell the highest products, have the highest competitive advantage, and so on), search and find a faster and cheaper production techniques, always sparing in the use of facilities production, can recognize and take advantage of market opportunities without any help from others, always anticipate every obstacle and evaluate various alternatives in solving problems, always expect valuable inputs, and willing to learn from failure for the progress of his efforts. Farmer groups like this are very likely to successfully develop their broiler farm business in the future. The second largest group is the group of farmers whose achievement orientation is medium (24.05%). These farmer group have started to have attention to the development of their broiler farm business.

The smallest group is the group of farmer who have low achievement orientation (20.25%). Farmers in this group do not realize the importance to improve their business performance and hence difficult to achieve progress. Farmer groups such as these require intensive coaching through achievement motivation training program (Achievement Motivation Training) in order to successfully develop their broiler farm business in the future.

Attribute of entrepreneurship In terms of self-confidence, most farmers (50.63%) had high confidence, in a sense are already independent in taking decisions and never went along with the other farmers in the broiler farm business activities. The second largest group is farmers who have the confidence which is still low and always went along with what is done by other farmers (31,65%). Farmers in this group is lack confidence, may be due to low education, lack of association, or maybe less information and therefore, this group should receive intensive treatment in order to be successful in the future. The last group is a group of farmers who started independently but still need the help from others or still often went along with other farmers (17,72%).

The next in terms of entrepreneurial attribute in the term of relationships with other people seems, that most farmers (62,02%) had a relationship with others is high. Farmers in this group highly respect relationships with others that they really appreciate the trust given from others and do not want to abuse that trust, always treat their workers well and proud when there are workers who succeeded in establishing their own broiler farm business. Based on that relationship with other people, they expect it to be the support efforts that are important to the progress of their broiler farm business in the future. The second group is the group of farmers who lack a relationship with others (18,99%), and that has begun to appreciate the confidence and relationships with others (18,99%).

Conclusions and Recommendation

1. Conclusion

Based on the results and discussion, the conclusion of the study are :

- (a) Entrepreneurial quality that owned the farmers who perform independent broiler farm business model in Maros District are included in the high category.
- (b) Attribute of entrepreneurship that make big contribution to the high of entrepreneurial quality of the farmers are innovation and creativity, achievement orientation, Self Confidence, and connect with others.

2. Recommendation

Based on the conclusions from the results above, then the suggestion of the study are:

- (a). Because this study is only a descriptive study, then needs an explanative study to explain effect entrepreneurial quality on survival and growth of independent broiler farm business
- (b) Farmers should establish business networking with corn farmers and local traders in order to obtain continuity supply of cheap feed and to obtain access to wider markets
- (c) Local government should create of an environment conducive to farmers and small broiler farm business to develop and to be successfully compete in the market over long time. And also, local government should increase her support for management business and broiler raising technique training to the farmers accompanied by providing subsidy of factor production and financial.

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