International Journal of
AGRICULTURE AND BIOSCIENCES
www.ijagbio.com P-ISSN: 2305-6622 E-ISSN: 2306-3599 editor@ijagbio.com

RESEARCH ARTICLE

The Feasibility of Self-Supported and Partnership Enterprises in Broiler Industries

Purnomo SS[1], AM Fuah[2], E Gumbira-Sa'id[3] and Machfud[3]

[1]Faculty of Agricultural, Karawang Singaperbangsa University; [2]Department of Animal Production and Technology, Faculty of Animal Science, Bogor Agricultural University; [3]Department of Technology of Agricultural Industry, Faculty of Agricultural Technology, Bogor Agricultural University, IPB Campus at Dramaga, Bogor 16680

ARTICLE INFO

Received: August 12, 2013
Revised: September 19, 2013
Accepted: October 15, 2013

Key words:
Broiler
Partnership enterprises
Self-supported enterprises

***Corresponding Address:**
Sulistyo Sidik Purnomo
psulistyosidik@yahoo.com

ABSTRACT

The national need for poultry meat is mostly (80%) supplied by domestic producers in Indonesia. Large companies such as Charoen Pokphand Group, Japfa Comfeed, and Anwar Sierad control 60% of domestic market (USDA, 2003). Those constraints resulted in diseases, fluctuation in prices, and uncertainty in time for sale and low margin which are naturally followed by the decrease in supply quality and quantity of broilers. Broiler industry by farmers can be through a self-supported business or partnership pattern by considering the advantages and disadvantages in terms of production efficiency and sustainability.

The objective of this study was to evaluate and assess the feasibility of business pattern practiced by farmers in broiler industries, including self-supported and partnership enterprises. Selected farmers from Indramayu, Subang and Karawang Regencies of West Java, those who practiced the two kinds of business pattern were interviewed and site observation was made. Production performances within three years of business period were collected and financial analysis was made to describe the economic feasibility of each practice.

The results showed that both types of broiler enterprises implemented under different management were economically feasible as indicated by high average of profit (E), significance values of Internal Rate of Return (IRR), and medium Payback Period (PBP). However, there was significance differences between the results obtained, of which partnership enterprises supported by standardized management earned higher profit USD$ 28.29% ($21.5 vs $15.5) per production period (5-6 periods/year), as compared to the self-supported enterprises. Other benefits in the self supported enterprise were 2 years shorter payback period, low risk and higher net income.

Cite This Article as: Purnomo SS, AM Fuah, E Gumbira-Sa'id and Machfud, 2013. The feasibility of self-supported and partnership enterprises in broiler industries. Inter J Agri Biosci, 2(6): 310-312. www.ijagbio.com

INTRODUCTION

The meat consumption from year to year is always going up, and the increase is in line with the GDP per capita increase (Daryanto, 2009). According to UNCTAD (2008), GDP per capita in Asia was growing at the rate of 6.2 percent per annum from 2003 to 2007. This condition provided a good chance for husbandry industries, especially broiler raising business.

The national need for poultry meat is mostly supplied (80%) by domestic producers. Large companies such as Charoen Pokphand Group (CP Indonesia), Japfa Comfeed, and Anwar Sierad control 60% of domestic market. Broiler industries can be carried out by the community by means of an independently-managed business pattern. Based on the data collected by Department of Agriculture (2003; 2005; 2008), the national need for broiler meat had been met since 2001, and the increase in the annual population was relatively high. The yearly rate of the population growth was 17.6% from 1980 until 2005. The highest population among the provinces in Indonesia was West Java, reaching 58, 084, 470.0 broilers in 2007.

The constraints result in disease, fluctuation in product prices, fluctuation in prices of production facility, uncertainty of sale time, low business margin which are naturally followed by the decrease in supply quality and quantity of broilers. Therefore, it is necessary to direct all efforts to develop agro-industry of broilers for meat to increase productivity, efficiency and sustainability of business.

According to UNCTAD (1997), partnership enterprise pattern in poultry business in developing countries is a

suitable system to achieve success in marketing, by supplying high quality products consistently. Nieto *et al*. (2013), that family firms perform fewer innovation efforts and are less inclined to turn to external sources of innovation-such as technological collaboration-than nonfamily firms. Finally, family firms are more likely to achieve incremental innovations than radical innovations.

The pattern of broiler business partnership in Indonesia is regulated by Decree of Ministry of Agriculture No. 472/Kpts/TN.330/6/1996, introducing Community Nucleus Company (PIR), Internship and management pattern. This study was aimed at evaluating the feasibility of the "self-supported" and "partnership enterprises" pattern in broiler industry, which will be beneficial to farmers who are interested in broiler industry.

MATERIALS AND METHODS

Sample and Data Collection

The study was conducted in three districts covering West Java, namely: Karawang, Subang, and Indramayu. The district has the third highest population of broiler compared with other provinces in Indonesia. The study was conducted through field surveys and observations in the field to collect primary data. Secondary data obtained from regional reports and business track record over the last three years (2007-2009). Twenty farmers were purposely chosen and interviewed on their farms enterprises and production characteristics. Ten selected farmers practiced self-supported and ten farmers with a partnership business pattern, characterized by their good reputation in broiler enterprises, with a minimum of three years business experiences, broiler population of between 1000-5000 broilers per production cycle were evaluated.

Data Analysis

The data analysis used three criteria to determine the feasibility of a farming business, namely: Payback Period, Net Present Value (NPV) and Internal Rate of Return (IRR). According to Gray *et al.* (2002), in order to find a comprehensive measure as the basis of whether or not a project is feasible, various methods so-called investment criteria have been developed. Different formula was used to calculate the feasibility of each pattern success to Payback Period, Net Present Value (NPV), Internal Rate Return (IRR), Risk Analysis (Expectation Value/E, Risk, The Relation between Risk and Profit).

RESULTS AND DISCUSSION

Clark (2008), continuous improvement and innovation partnerships and network design and management can be improved in the agricultural industry. Partnership and Network Design Strategies are needed to speed, scale and impact of the valuable improvements and innovations in the beef industry by involving key players in the industry and ensure support for all partners.

In a self-supported business, these conditions of high and fast fluctuation of market prices can result in losses to farmer, while partnership can reduce risk. Table 1 showed that both patterns had a level of feasibility and risk. In fact, however, the partnership pattern was more feasible and the risk was smaller compared to the self-supported enterprises pattern.

Table 1: Feasibility of Broiler Enterprise based on Financial Aspect

Criteria	Self-Supported Enterprise Pattern (SEP)	Partnership Enterprise Pattern (PEP)	Description
E	US$ 3,113.4	US$ 3,578	PEP is more profitable
CV	0.0000977	0.000058	PEP smaller risk
L	US$ 3,112.8	US$ 3,577.6	PEP is more feasible
NPV	US$ 15,943.1	US$ 22,235.7	PEP is more feasible
IRR	34.20%	34.20%	Feasible
PBP	6 years	4 years	PEP shorter time

In terms of time efficiency, partnership enterprise was faster than of the self-supported ones, indicating an economic efficiency, that is more attractive to investors since the average net profit was higher than that in the independent pattern (US$ 3,028.4 vs US$ 1,847.4). In addition, capital requirement provided by farmers is smaller because most of the working capital is taken care of by the partnership company through loans system. In the self-supported system, capital ability of most farmers was limited affected in a short raising period, averagely 25 days with a small live weight, 1.1 kg per bird, so the net income was relatively small (an average of US$ 184.7 per period). The capital needed for raising 5,000 broilers was at US$ 19,221.2 (fixed cost of US$ 14,862.9; variable cost of US$ 4,358.2). Another obstacle in the self-supported business was that all risks of production failure are the responsibility of the farmers.

In the partnership pattern, some part of the expenses was the responsibility of the nucleus company in the form of delivery of production facilities during the production process. Production period in a single raising period becomes longer with an average of 31 days raising period achieved live-weight of 1.7 kg per bird. The profit obtained was US$ 511.2 per rising period (an average of seven times production/year) was higher than self-supported enterprise, as well as compensation for loss during production. Comparing the two patterns, partnership enterprise had advantages such as: 1) the financial turnover and profit are bigger, smaller capital needed; 2) better continuity and sustainability of the business; 3) the market and selling price certainty; 4) the fair risk.

The results of research conducted by Lee Li (2007) cited Gongming Qian (2007), small and medium-sized enterprises (SMEs) in the technology industry have formed a partnership. SMEs who seek foreign markets should form a partnership to pool their resources and manage diversity, while SMEs's are focused on the home market, they must use independent operation mode. Young SMEs established may be interested in a partnership. SMEs who enjoys a first mover advantage should not rely too much on partnerships for external resources. Instead, SMEs that do not enjoy the first mover advantage can take the partnership as an important source of external resources. Implementation of SMEs's need to choose between the partnership and fashion independence and thus explains why the partnership works for some SMEs's, but not others.

Conclusion

It can be concluded that, both enterprises were economically, feasible. Despite the feasibility results, in general, significance differences found between the two patterns, of which partnership enterprise was more feasible (US$ 3,112.8 vs US$ 3,577.6) generated greater profits (12.9%), based on investment, had low risk and smaller losses. In addition, payback period of partnership pattern was two years faster than the self-supported pattern. These results indicate that partnership model in broiler enterprise gave more profit, time efficiency and benefits to farmers as compared to self-supported pattern.

REFERENCES

Clark RA, 2008. The Partnership and Network Strategy. Austr Farm Bus Manage J, 5: 57-62.

Department of Agriculture, 2003. Livestock Statistics Year Book 2003. Jakarta: Directorate General of Livestock Production Department of Agriculture of the Republic of Indonesia.

Department of Agriculture, 2005. National Livestock Development Policy. Jakarta: Directorate General of Livestock Production Department of Agriculture of the Republic of Indonesia.

Gongming Qian LL, 2007. Partnership or self-reliance: prescriptions for small and medium-sized enterprises. J Bus Strategy, 28: 29-33.

Livestock Service Office, 2008. Statistik Peternakan. http://www.disnak.jabarprov.go.id.

Maria Jesus Nieto MJ, Santamaria L, Fernandez Z, 2013. Understanding the Innovation Behavior of Family Firms. Journal of Small Business Management. International Council for Small Business, 25 OCT, 2013.

United Nations Conference on Trade and Development (UNCTAD), 1997. Opportunities for vertical diversification in the food processing sector in developing countries. Geneva: trade and development board, commission on trade in goods and services, and commodities expert meeting on vertical diversification in the food processing sector in developing counties.

United State Department of Agriculture (USDA), 2003. Vertical Coordination in the Pork and Broiler Industries. http://www.ers.usda.gov