

The Learning by Doing Method on Skill Acquisition for Micro Entrepreneur: Study in Indonesia

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ABSTRACT

This study examines the role of learning by doing method on skill acquisition for micro enterprises that do not have a formal academic education. The learning by doing can be able to encourage the procedural knowledge acquisition of the junior auditor. The skill required on business process can reduce the dependence of micro entrepreneur from the industrial factory. This study uses duck farmers who need fully skilled for business process completing. This study uses interview method to identify the sample's problem and quasi-experiment method to examine the skill acquired from learning by doing and the efficiency of relationship. The examination reveals that the implementation of skill from learning by doing can significantly reduce the production cost rather than without it. This study has a contribution on the reducing of economic inequality faced by the micro entrepreneur. The result also has a contribution to the learning literature enrichment, namely learning by doing.

Keywords: learning by doing, micro enterprises, production efficiency, quasi-experiment

1. INTRODUCTION

The production process that implements the high technology can enhances a company to be as the winner in the specific market. The implementation of technology will reduce production cost in two ways. First, the implementation of technology will increase the productivity. Then the optimum production will enhance the competitive price of the product, and it can make the product compete with competitor's product. Second, the reduction of production cost can reduce labor that supports the implementation of technology, because the advanced technology commonly implements automatic panels in the process of production. In a second way, it enhances more efficiency in direct labor cost and finally reduces the cost of production.

Both methods have implication that technology has a significant relationship with productivity and employment, as stated by Corley et al. (2002) that the complex relationship exists among technology, productivity, and employment. However, Corley et al. (2002) also categorized the industrial sector based on the technology level. The classification of industrial sectors includes high-tech sector; such as petroleum, car, and chemical and low-tech sector; such as paper, food, and tobacco. That categorization shows that an implementation of technology cannot just put in any the industry because of the characteristic of the industry's final products (finished goods).

The problem of technology implementation on micro entrepreneurs is the high investment requirement. In the other hand, they cannot access to the banking to get fund

because micro entrepreneurs usually do not have good accounting as bank requirement to give the funding, such as no implementation of business entity principle. The owner of micro entrepreneur commonly also becomes the company management, so the implementation of business entity principle makes easy for bank to assess the micro's solvability and liquidity. As an illustration, sometimes the duck farmer as one type of micro entrepreneur have to sell the ducks that are still in the productive period, if the result from ducks (e.g. eggs) cannot cover the farmer's family expenditure. In the other hand, the micro enterprises are very vulnerable of the changing of dollar currency rate because they must buy the input of production (e.g. day old duck or nutrition) from the commercial factory. Their dependence on the commercial factory for the whole of production aspects and the inappropriate good accounting will deteriorate the micro entrepreneur ability.

This study uses duck breeder industry as the case sample for the implementation of learning by doing method on skill acquisition. This area has a high prospect in Indonesia, but the breeders do not enough experience to manage farm sector compare to agriculture sector (Bank Indonesia, 2015). Besides this reason, the micro scale of duck breeder is easy for domestic or household to manage as an effort to get additional income. According to this problem, this study has objective to provide emphyrical evidence that the skill acquired from learning by doing can enhance the business process efficiency of micro entrepreneur. The duck farmers as case sample need fully skilled in the business process, because a breeding process involves the high human intervention, such as how to choose duck's egg, formulate duck's feedstuff and nutrition, and build a healthy shelter for the duck flock.

This study uses interview method to reveals the duck farmer's problems on maintaining the sustainability of the operation. Based on the interview, we identify the operation of duck farm from input to output and then analyze which problem in the entire operation need skill for solution to produce high-quality duck and to get more efficient in a breeding and growing process. The identification and analyzation are necessary after the deep interview because of the learning by doing treatment for skill acquisition. Therefore, this study also uses a quasi-experimental method that conducted more than five months to measure the effect of skill implementation on the efficiency level.

According to the learning by doing method for acquiring skill, this study implements learning in class and learning in practice with supervisor's feedback. The method has an objective that the experiment subjects understand the task related to breeding and raising duck through feedback after learning in class. Wittrock (2010) and Batkoska dan Koseska (2012) state that if the learning objective is to understand the object, so the learner will keep the knowledge in the long-term memory and will integrate the knowledge with the prior experience.

The experiment reveals that the ability of the experiment subjects to optimize the number duckling or day old duck in hatch breeding and manage the duck's growing is to encourage more efficient on production cost. This study measures the efficiency based on the weight duck difference and the growth period difference. Besides that, the study also uses production cost difference because the experiment subjects are not necessary to buy duckling or day old duck that has cost more than 100% compared to hatched eggs by their selves.

The result contributes to enhance the competitiveness of micro entrepreneur. The number of micro, small, and medium enterprises (MSMEs) in Indonesia significantly increases after a crisis in 1997. Moreover, it has the significant role in absorbing potential employment in Indonesia. The Indonesian Government through *Kementerian Koordinator Bidang Perekonomian* (2016) states that the priority of Indonesian Government policy for MSMEs is to enhance the competitiveness of MSMEs to achieve sustainable enterprises. The regulator who has the power to create a policy needs to know which is exactly the urgent

problem faced by MSMEs to become the leader in competition and may establish regulation to protect the MSMEs.

This result also contributes to learning literature that usually focuses in academician or professional, such as students or auditors as study conducted by Earley (2001 and 2003), Nurim and Harjanto (2015). There is little evidence about learning method for informal workers, although micro entrepreneur, such duck breeders, also need procedural knowledge acquired from experience for more efficient production process. The result implies that the appropriate learning method is very important on skill or knowledge acquisition whatever the subject background.

The details of descriptions below include into three phases; experiment, result and discussion, and the last are conclusion and suggestion. The experiment section will describe why this study focuses on the duck breeder and what the treatment is to be used in a quasi-experimental method. The second step is result and discussion that will explain about the possibility of skill to be implemented in the duck farm operation. In the second stage, this study also describes the problems faced by the duck breeder. The last of this study states an opportunity for the future study to complete the understanding about MSMEs in general issue.

2. LITERATURE REVIEW

Study of Abdolmohammadi and Wright (1987), Tubbs (1992), Choo and Trotman (1991), Tan (1995), Davis (1996), Libby and Frederick (1990), and Lehman and Norman (2006) reveal that the cognitive structure is different between the experienced and inexperienced auditor. The differences can be about the memory structure, the knowledge structure, the organization structure, the cognitive capacity, or the information pattern. The cognitive structure will influence the experienced people in how to process information, to perceive a task, to detect irregularity, or to select information to support the judgment or decision.

The other prior research has revealed that the experience encourages the consistent behavior of auditor (Bédard, 1989; Shuell, 1986). The consistency will enhance the same perception of group member about a task because the member has the consistent judgment (Abdolmohammadi and Wright, 1987; Tubbs, 1992; Choo and Trotman, 1991; Tan, 1995; Davis, 1996; Libby and Frederick, 1990; Lehman and Norman, 2006). Study of Choo and Trotman (1991), Libby and Frederick (1990), Lehman and Norman (2006) state that auditors who have same perception about a task will perform a judgment more efficient because they will be encouraged to choose and to select the same clue on this task. As a consequence, the auditors will focus on the relevant information that supports their perception. Therefore, the prior study has revealed that the experience has a role on auditor's judgment accuracy.

In this study, supervision is a feedback of learning. Earley (2001 and 2003), Bonner and Walker (1994), Hirst et al. (1999) state that the form of feedback is learning by doing and it is to acquire knowledge based on expertise. This study defines the skill that comes from learning by doing as the skill achieved from the learning from experience or practice that supervised directly by the expert. The supervision has objective that the learner has a perception that the knowledge is easy in implementation. In this case, the breeding process with hatched machine needs almost 90% human intervention. The skill is required to identify fertility eggs, to determine and to keep the temperature stability of eggs, and to determine the humidity of eggs. The group member only can achieve the skill of breeding process through learning by doing, and the feedback is part of the learning.

Study of Bonner and Walker (1994) and Earley (2001 and 2003) reveal that feedback can help auditor junior to acquire procedural knowledge that acquired from experience. Sitzmann et al. (2010) and Thurlings et al. (2013) also state that feedback can enhance the understanding of a task and reduce the cognitive lack. Therefore, auditor junior who receive feedback will get higher knowledge compare to auditor junior who does not receive feedback on internal control review task (Nurim and Harjanto, 2015).

The prior study states that the cognitive structure is different between the experienced and inexperienced auditor (Abdolmohammadi and Wright, 1987; Tubbs, 1992; Choo and Trotman, 1991; Tan, 1995; Davis, 1996; Libby and Frederick, 1990; and Lehman and Norman, 2006). The other finding of feedback also states that feedback can reduce the cognitive lack, enhance knowledge structure, and achieve procedural knowledge (Bonner and Walker, 1994; Earley, 2001 and 2003; Sitzmann et al., 2010; Thurlings et al., 2013; and Nurim and Harjanto, 2015).

3. THE EXPERIMENT

3.1. Sample Characteristic

There are seven industry sectors of MSMEs in Indonesia, namely trading, manufacturing, agriculture, farm, fishery, and service (Bank Indonesia, 2015). This study focuses on a poultry farm, especially duck breeder group as a sample based on the several steps of the sample criteria. The criteria have an objective to optimize the learning method based on the level of skill implementation on business process. The optimum implementation means that technology implementation is not the only solution for the capability of micro entrepreneur enhancement. Therefore, this study performs observation and interview to the objects for understanding of business process that urgently needs the skill implementation, such as input and production process, market scope and opportunity.

First, this study determines the criteria, namely (1) the industry must not destroy the nature and (2) the industry output can encourage another economic opportunity, as a consideration of the sector characteristic. Based on that criterion, this study focuses on agriculture, farm, and fishery sector, because the outputs of the three sectors encourage another sector, such as restaurant, trading, and manufacturing. The three sectors have a tight relationship with nature.

The next criteria are (1) the industry does not have boundaries for a new entrance, such as capital or skill and (2) the industry involves the group of society for market demand fulfillment. According to the both criteria, this study focuses on farm and fishery sectors, because to run both sectors can be done in the backyard or do not need large land compare to agriculture. Besides that, the output of farm and fishery can be harvested more early rather than agriculture's product.

This study performs observation on the farm and fishery sectors to understand the production process and to identify the possibility of implementation innovation. Based on observation, this study focuses on the farm sector, especially duck breeder, because this sector requires skill, such as how to choose high-quality eggs to be hatched artificially, to choose the high quality of duckling, and to maintain healthy shelter and nutrition. As an illustration, the market requires the specific weight of duck farm output determined by high-quality eggs in hatching, high-quality duckling, and proper nutrition during the breeding process. However, it is different with fishery which accepts the variation weight of fishes. Mito and Johan (2011) state that the protein in duck meat has same level with chicken or fish and more over duck contain higher calcium compare to fish and chicken. Duck meat also

becomes a part of a well daily diet for human through the substantial portion of the duck meat nutrients (Dean and Sandhu, 2016).

The objective of deep interview to the duck farmers is to identify the problems, includes the understanding of farmer about the duck characteristics in the breeding process, the environmental limitation to provide natural duck's feedstuff, the treatment of farmer on raising a duck, and the opportunity of duck farmer in increasing domestic income. This study performs interview to the leader and chief leader of a duck farmer group and this group has voluntary 15 members. Then, this study conducts the quasi-experiment to the member of this group for more than five months.

3.2. Quasi-Experimental Procedure

This study uses a quasi-experimental method with the treatment, namely learning from experience and feedback. Therefore, there are two categories of treatment group: a group who only receives learning from experience and another group who receives learning from experience and feedback after the learning process. However, the both of group will get a same training before receive the treatment to make sure that two groups have same ability level.

This study involves a group which the member will collaborate to finish a task, namely to hatch duck eggs and to raise duckling or DOD, and the tasks will be done together almost five months. In that case, the member of the group must become a solid team, have same vision about the task, and be encouraged to maximize their effort to reach the group's objective. The member group's attitude may influence the result, such as inequality power, inequality knowledge, or inequality opportunity. Therefore, the member must have the same cognitive structure in which the memory structure, the knowledge structure, the information organization structure, the cognitive capacity, or the solving pattern information for optimum task' result.

Based on the role of experience on task's result, the duck farmer gets same training about how to hatch duck's eggs, to formulate duck's nutrition, to handle vitamin and vaccine, to construct duck's shelter, and to harvest ducks. The first step of the experiment, the both groups attend the whole of a learning process of hatching eggs and growing duck. The hatching activity includes choosing eggs and managing the duck breeding; then the growing duck includes to prepare duck shelter and to maintain duck nutrition. The learning is performed formally in class and informal in a field under the supervision of an expert.

The training has an objective to enhance the same perception about the task, and it will encourage the judgment consistency of the group member. Especially, the training will create the same cognitive structure among the members. Then, the same cognitive structure will achieve the consistent judgment which is needed to achieve an optimum result. The same cognitive structure also indicates that the group members have the same perception about how to perform and to finish the task. As for implication, that member has the same expectation about the objective of this task.

The next step on the quasi-experiment is to practice the learning and receive feedback or without receive feedback. Therefore, there are two groups: a group which practices the learning and receive feedback during the training or treatment group and a group which only practices the learning without receive feedback or control group. The both groups do not get the next treatment equally, such as the member of treatment group receives the next supervision intensively on duck breeding process and duck growing management. However, the member of control group receives a machine and eggs, and then they are encouraged to breed the eggs and to raise the duck without supervision. The different of both treatments has

objective to provide empirical evidence about the role of an advanced skill to increase efficient production process.

The 13 duck farmers involve in the experiment and the grouping of duck farmers is randomly based on the distance between their farmer's houses. The range is to give easiness on coordination among the group members. Every group has to hatch around 200 duck eggs. Therefore, the members of each group should collaborate to maximize the number of eggs which are become duckling or day old duck. Then, each group must raise the duckling until ready to harvest and the maximal growing period is in sixty days. The study compares the result of both activities, namely hatching eggs and raising ducks between the both of group. The six farmers are as a treatment group, and the seven farmers are as a control group. This study did not declare about the treatment to the farmers, but the whole of farmers must commit to the entire learning process.

The whole process from learning and treatment spends more than five months, namely three months for training and two months of treatment. In three first months, the both groups learn to hatch eggs for a month and learn to raise duck for the two months. While the eggs are being waited to be breed, the both groups learn to construct the duck shelter and to formulate duck nutrition and feedstuff. After the eggs become duckling, the both groups learn to manage the duckling, such as time for giving vitamin and vaccine, time for giving different nutrition, and realize the duckling condition.

At the end of the second month, the ducklings have one month old. Therefore, the group start receives treatment in the third month of five months. In this period, the ducklings have old enough to receive ordinary nutrition and the both groups have sufficient time to do another task. If the groups receive treatment after the third month, the both groups will be bored and it causes mortality of group members. The both of group must prepare the eggs for the breeding process in the third first month of five months. Finally, the two rest months of five months, the both group will end their practice.

As mentioned before, the treatment is given feedback after doing practice, and as the opposite, the other group is without feedback. In this section almost similar with the training section, but the treatment group must practice their knowledge from training by their selves. The supervisor will control or supervise their task, but the group must have initiative or motivation to do the task properly. As an example, on the third day of hatching process, the group must identify the fertility of eggs, so it must do by the member and supervisor will check the accuracy randomly. However, the control group must do it by their selves without supervision.

The result of treatment is the number of duckling from breeding process and the weight of duck after two months of raising process. The number of duckling shows the ability of the farmers to detect or identify the fertility of eggs that have hatched. The higher number of duckling indicates the lower input cost. The weight of duck is also as the measurement of the ability of farmer in managing the raising duck. The ability will cover the whole of production cost because consumer only receives a certain weight of duck. The lower product cost comes from lower input and production cost.

This study defines the skill as skillful engineering in efficient process achievement. This definition indicates that skill does not always involve a massive or complicated machine to produce an efficient product, but the implementation can overcome the problem in term of efficiently through the creative engineering. Therefore, the implementation of skill in farm sector encourages the surrounding community involvement as a consequence of the number domestic or household participations. Especially, the skill reduces the economic inequality through the decreasing of the dependence of micro enterprise on industrial factory.

4. RESULT AND DISCUSSION

4.1. Problem Description

This study performs deep interview to subject farmers in order to get understanding about the problem faced by the duck farmers. The questions are about the production capacity and the understanding of farmer about how to manage raising duck. This study also asks about the marketing problem that may have correlation with the skill of farmer in raising duck.

How many ducks are raised by you in a month? The mean of duck that owned by a farmer is 50 ducks. The farmer buys the 1 or 2 days old of small duck or day old duck (DOD) in commercial breeding. The DOD price is IDR7.000 or 8.000 for a DOD. Every member of a group has an obligation to breed at least ten ducks in a week to achieve minimum earnings group for 600 duck flocks a month. The profit from a duck is IDR5.000, so every member will earn IDR50.000 for ten ducks in a week or IDR200.000 for 40 ducks in a month.

This group concerns with the minimum number of duck rising because the market must afford high fare of transportation. Inability of duck breeder to produce 35 ducks in a week also becomes the reason of market to force duck breeders to decrease the price of duck meat. It implies that if the duck breeders cannot give a guarantee about the continuity of duck meat supply, so the market feels reluctant to take duck meat from this duck breeder group. In the other side, the profit from duck has the important role for the entire household that is dominated by the informal worker. The duck breeder group wishes to breed at least 150 duck flocks a month in the future, so the income of member will be more than IDR30.000 a day.

What do you know about duck's shelter? The farmers use simple shelter from local material, such as bamboo and plastic for duck flocks. The farmers face extreme weather that can decrease the duck's survival. In another side, if a farmer wants to raise at least 150 duck flock a month, so the duck breeder must provide enough space for duck shelter and infrastructure to support the raising duck. The higher quantity duck flocks that will be raised by breeder requires the higher cash for DOD procurement, hiring labor, and for extent the shelter.

Based on the interview, the environment surrounding of the breeders has significant potential advantages to breed duck flocks, especially for duck breeder group, because the village still provide vast land to breed duck flocks and it is cheaper when it is rented by a group. However, the duck breeder needs enough cash for investment. Unfortunately, the breeders do not have access to the formal funding as well as from the banks. They do not have enough ability to manage their money as business as usual. Some times they must use their money of business for their domestic needs. As a consequence, they need much time to start their business because they do not have enough money for saving.

How long do you need to raise ducks until the ducks are ready to be harvested? The farmer needs 70 days for growing their duck so that the farmer can sell their harvest only every 70 days. However, the members face a problem with the price of DOD. There are several quality levels of DOD, and the quality reflects the price level of DOD, namely higher quality DOD higher rate of DOD. Finally, the DOD quality correlates with the quality of duck meat, and market requires a certain weight of duck meat at least 1.3 – 1.5 kg for a duck. If the breeder does not have enough capital to purchase high quality of DOD, so the breeder cannot produce duck meat as market's requirement. As a consequence, the breeder does not get enough profit, because the market can force the price of duck meat.

The duck breeding expertise is the ultimate obstacle of duck breeder group because the breeders entirely depend on the commercial production in procurement of DOD and feedstuff. The expertise has a significant role in the management of the duck hatching and

raising. Moreover, the duck breeder also depends on the commercial production for procurement of duck nutrition, vitamin, and vaccine. Therefore, the duck breeder cannot get maximum profit, because the price of DOD, duck food, duck vitamin, and duck vaccine determined by commercial production that also depend on dollar currency rate.

The industrial factory can provide the high quality of day old duck (DOD), duck's feedstuff and nutrition, and vitamin or vaccine. The company can hire the expert in the production of all kind of product that is needed in breeding and raising duck. The production process of duck breeder requires the expertise on choosing duck's egg, on formulation duck's feedstuff and nutrition. The high quality of duck's eggs will enhance the high quality of day old duck. Therefore, this industry does not only involve technology in production process, such as to produce duck's feedstuff and nutrition or vitamin and vaccine, but the industry must include the expertise to formulate the duck's vitamin and vaccine, especially to produce high quality of day old duck.

How do you get knowledge for duck production process? The farmers do not have training about duck management, they get the knowledge from the internet or ask someone who is perceived has expertise or has experience. The farmers also share each other or discuss how to raise ducklings, but there is no experience about how to hatch eggs. Therefore, the farmers buy DOD from commercial factory directly and rely on duck's feedstuff produced by an industrial company also. They have an opinion that the duck's feedstuff from an industrial company is more than enough to cover the duck's nutrition during the raising process. Sometimes, farmers give table scrap as typical waste from domestic. When the rupiah rate currency is depreciated with dollar currency rate, the farmers face higher production cost.

The traditional duck farmer can use a hen to breed the duck eggs, and the farmer usually has heritage chickens. However, this method is not effective and efficient because the farmer needs more than ten hens to breed 100 eggs. The farmer also needs vast space and need high cost for feeding the ten chickens in the breeding process. The cost of 10 hens is more expensive than buying DOD from a commercial factory.

What do you think about the duck breeder's prospect for your income source? The farmers face a high cost of raising duck. The farmers cannot sell their output directly to the final consumers because their village is far from traditional market and they do not have enough ability to handle duck meat. They depend on the intermediary who comes to their village and has enough money to buy the whole of duck farmers' output. Besides that, the duck breeders cannot give a guarantee the number of duck meat supply in given period, so the intermediary feels reluctant to afford high-cost delivery. The farmers wish that the income from duck could be a substitute of their earnings as an informal worker because the land surrounding them has the high potential for breeding duck.

4.2. Skill from Learning by Doing and Efficient Level

This study summarizes that the sample faces two primary problems, namely quality, and quantity of duck meat produced by this group. In one side, the duck breeders still breed duck meat quality under the market's requirement, because the quality depends on the quality of DOD, nutrition, vaccine, and vitamins. In the other side, the duck breeder must provide significant cash for getting high quality of DOD, nutrition, vaccine, and vitamins. Therefore, the high price of DOD, nutrition, vaccine, and vitamins as production input determines the production cost of duck meat. Notably, the price of input relies on the rate of dollar currency. If the duck breeder cannot maintain the level of nutrition in raising duck, as the consequence, the weight of duck meat does not fulfill the market's requirement.

Based on the problem, the duck breeders urgently need the skill on the management of duck hatching and raising. The implementation emphasizes on easiness of technology used

by users. Cheng (2011) states that ease perceived in using technology has a positive influence on user's attitude and intention to use technology. Then, if the user has a perception that the technology is easy to implement in operation, therefore the user will have the opinion that the technology will enhance higher performance (Cheng, 2011). The perception of the user is necessary, because an education has the positive effect on the farmer willingness to adopt sugar cane cultivation (Arti K et. al., 2016). The duck breeders as the sample are the informal workers that have the same condition as well as in the adoption of sugarcane cultivation case.

According to skill implementation on the duck hatching, the duck breeder must learn about the quality of egg as the input in artificially hatching. This application is as an engineering skill because the duck breeders must intensively learn from experts in the hatching of eggs. Study of Mangisah and Sukamto (2016) reveal that duck breeder needs the training to choose the fertile eggs on artificially hatching. The study also shows that if duck breeder can hatch the DOD personally, so they can reduce the cost of hatching almost 50% compare to buy DOD from commercial breeding.

The training also includes how to operate the hatching machine and to treat the fertile eggs. Although the duck hatching machine is a simple device, because it uses the traditional light, duck breeder must understand how to produce maximum DOD from the duck hatching machine, such as when the eggs need water to keep the level of humidity and when the eggs need air to keep them in high outside temperature. The positive effect of DOD that personally hatched is that the duck breeders can diversify their income from selling DOD compare to other duck breeders.

A skill implementation also involves the raising duck management. The raising process includes preparing the duck shelter and the duck nutrition. The construction of the duck shelter determines the optimum of production, such as the optimum number of duck in particular space (Ali and Febrianti, 2009). Study of Ali and Febrianti (2009) reveal that the optimum number of duck flocks is five ducks per 0.5 square meters in starting period. According to Ali and Febrianti (2009), the un-optimum number will affect to the temperature increasing in shelter and duck flocks prefer drinking water rather than eat feedstuff. Moreover, duck flocks hardly compete to get feedstuff, so the weight of duck flocks will be not optimum.

Duck nutrition is also an important object in advanced skill implementation. The food formulation does not only have the relationship with the weight of duck, but also the formulation determines the quality of duck meat. Randa (2007) states that duck meat have six types of off odor, including rancid, fishy, fatty, moldy, beany, and earthy. According to Randa's finding (2007), vitamins C and E can reduce the off odor and fat of ducks, but the vitamins have not effect on duck meat quality. The duck breeder also must understand about the flesh characteristic of duck species. Randa (2007) states that the meat of the *cihateup* duck species is fattier and have more off odor rather than the meat of the *analabio* duck species.

However, if duck breeders depend on feedstuff produced by commercial factory, so also the increase of dollar currency rate will increase production cost. Especially for vitamins and vaccine, the duck breeder must rely on commercial production. Therefore, the skill implementation is necessary to reduce duck breeder's dependence on commercial product production. The dependence also can be reduced by using local feedstuff, such as assorted seeds, table scraps, and rice bran. The duck breeder needs the training to understand the proper composition of nutritions that will affect to the quality of duck meat. Moreover, training also needed to create a substitute vitamins and vaccine using local stuff such as local plants.

What is the cost difference rate in and why does it happen? The result of learning from feedback can reduce the production cost of the duck farmers. The reduction comes from hatched duck eggs artificially that can be done by farmers their selves. The cost of DOD is IDR7.000 to IDR8.000 each, but farmers can buy duck eggs with cost IDR3.000 to IDR3.500 for a duck egg. The breeding process needs 27 days to 30 days, and it consumes electricity cost to increase and keep eggs temperature. The electricity cost is about IDR50.000 a month. Therefore, the total cost of 100 eggs is IDR350.000 and adds with power cost become IDR400.000. The cost is cheaper than buying DOD IDR800.000 for 100 DOD.

In this experiment, each group hatches 200 duck eggs, and the successfulness rate is difference between treatment group and control group which is almost 30%. The control group cannot hatch duckling as optimum as the treatment group because the hatching process needs persistency the farmer to control humidity and temperature. Although the hatched machine has a thermometer, the farmer must provide enough time to turn around the eggs to get an appropriate humidity and temperature.

The control group put too many eggs in the hatching machine, so the humidity and temperature are not in the right level because of the inappropriate timing and way when the eggs must be turnover. They also often forgot to check the water level which is placed in the bottom of the hatching rack that sometime let it in empty and to spray water to the eggs to keep the humidity. Those inappropriate treatments caused the level of the duck hatching is lower compared to the treatment group.

The control group also affords higher production cost compared to the treatment group because they used too much duck feedstuff produced by the industrial factory. Although commercial feedstuff is very useful to make the duck growth to achieve required weight, the cost is much higher than feedstuff formulated by the farmers-selves that use the natural raw material. The effectiveness of duck growth of control group is also less than the treatment group because they put too much ducks in the duck shelter. To achieve optimum growth, they have to put eight until 10 per meter square, but they put much more than that, sometimes until 20 per meter square. Therefore, the ducks must hardly compete for each other to get enough feedstuff. The condition makes the less big duck and then cannot get optimum growth.

5. CONCLUSION AND SUGGESTION

The skill implementation has a significant role for duck breeders, because of their production input, such as DOD and nutrition; fully depend on commercial production that determines the input price based on dollar currency rate. The duck breeders must provide more capital for getting the higher quality of input. The higher quality of input will determine the weight of duck meat as the market's requirement. The duck breeders also must provide more capital for optimum procurement number of DOD for a continuous supply of duck meat. The intermediary will force the farmers through the duck meat price as the compensation of high fare transportation, because the duck breeder cannot provide enough number duck meat for the duck meat market. It implies that the duck breeders face quality and quantity problem for their dependence reduction on the commercial factory.

The skill implementation does not only have a meaning for production cost reduction, but also it can encourage the duck breeder's independence for their business sustainability. Because there is no barrier for new entrance of duck breeder, a household can run the duck farms, and it will absorb potential labor. The business can also involve group, so the capital for buying duck food supported by a group to get cheaper food.

This study uses learning from experience or practice and feedback from expert or learning by doing method for acquiring the skill. Learning from experience or practice inspires from the characteristic of an experienced auditor who has a right memory structure, knowledge structure, or organization structure, and achieve an optimum cognitive capacity or information solving pattern (Abdolmohammadi and Wright, 1987; Tubbs, 1992; Choo and Trotman, 1991; Tan, 1995; Davis, 1996; Libby and Frederick, 1990; and Lehman dan Norman, 2006). Then, feedback can enhance the understanding of a task and reduce the cognitive lack (Sitzmann et al., 2010 and Thurlings et al., 2013). Therefore, the junior auditors receive training using this method such as Bonner and Walker (1994), Earley (2001 and 2003), and Nurim and Harjanto (2015).

The supervision has objective that the learner has a perception that the skill is easy in implementation. In this case, the method enhances the ability of the duck breeder, because the breeding process with hatched machine needs almost 90% human intervention. The skill is required to identify eggs fertility, determine and keep the temperature stability of eggs, and determine the humidity of eggs. This study uses interview to identify the duck breeder's problem and quasi-experimental method to compare between the two of groups' achievement on advanced skill. The comparative result shows that the successfulness rate is difference between treatment group and control group which is almost 30%. The difference rate effects on production cost and profit, especially on the duck breeder dependence on commercial factory's production.

This result contributes in the economic inequality reduction because of the dependence of micro enterprenuer and the capability of micro enterprenuer enhancement. The micro entrepreneurs need skill rather than advanced technology, especially for business that involves fully human intervention, such as farmer. The government also can encourage more involvement of the local rural banks in the funding because their funding can support the production capacity increasing. The more attention of government will reduce the dependence of micro on commercial production's product that dollar currency rate determines the product price.

The future study will be in the implementation of learning method, but the study must identify the product characteristic of MSMEs and its production process. The identification has an advantage in analyzing about what problem relates to the MSMEs' activities. The accuracy of interpreting will enhance the accuracy of problem solution and provides approaches to reduce the adverse effect of advanced skill implementation in MSMEs, such as the role of direct labor reduction and capital demand increasing.

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