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Original Article

The role of livestock farming groups in developing the empowerment of beef cattle fattening business in the Cirebon Regency

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Abstrak

Tujuan: (1) Peran kelompok peternak dalam fungsinya sebagai tempat belajar, tempat produksi, dan tempat kerjasama dan usaha anggota, (2) keberdayaan peternak sapi potong, (3) hubungan antara peran kelompok dengan keberdayaan peternak sapi potong di Kabupaten Cirebon.

Metode: Penelitian ini dilaksanakan pada bulan Juli sampai bulan Agustus 2021. Metode penelitian adalah survei dan observasi di lapangan. Jumlah responden dengan menggunakan rumus *Snowball* sampling adalah 60 responden dari 5 kelompok tani ternak di Kabupaten Cirebon. Analisis data menggunakan bantuan SPSS 26 Spearman rank correlation test.

Hasil: Peranan kelompok belum optimal baik sebagai tempat belajar, tempat usaha, dan tempat bekerjasama, hal ini perlu keterlibatan pihak dinas pertanian Kabupaten Cirebon, lembaga pendidikan dan lembaga swasta untuk ikut terlibat dalam mengembangkan peranan kelompok yang ada di Kabupaten Cirebon. 1) Peranan kelompok (67, 54%) baik berfungsi sebagai tempat belajar, tempat produksi, tempat kerjasama dan tempat usaha belum optimal. 2) Keberdayaan peternak sebagai pemelihara ternak dan manager sudah tinggi (47,76%) menunjukkan bahwa peran peternak sebagai pemelihara dan manajer sudah berjalan optimal. 3) hubungan yang cukup kuat antara peranan kelompok peternak dengan keberdayaan peternak sapi potong dengan nilai korelasi rank spearman sebesar 0,674.

Kesimpulan: Keberdayaan peternak dalam penelitian ini mengukur 2 aspek yaitu 1) peranan kelompok belum optimal, sedangkan 2) untuk kemampuan peternak dalam memelihara dan berwirausaha bernilai tinggi. Hasil koefisien korelasi hubungan peranan kelompok dengan keberdayaan peternak sapi potong adalah 0,674 hal ini dapat disimpulkan bahwa hubungan yang cukup kuat antara kedua variabel tersebut.

Kata Kunci: Kelompok tani ternak; Pemberdayaan; Peranan kelompok

Abstract

Objective: The research is as follows: (1) The role of the farmer group in its function as a place of learning, a place of production, and a place for cooperation and member business, (2) the empowerment of beef cattle farmers, and (3) the relationship between the role of the group and the empowerment of beef cattle farmers in Cirebon Regency.

Methods: I conducted this research from July to August 2021. The research method was survey and field observation—data analysis using SPSS 26 Spearman rank correlation test. The number of respondents using the Snowball sampling formula is 60 respondents from 5 livestock farmer groups in Cirebon Regency.

Results: The empowerment of farmers in this study measures two aspects: farmers' ability to maintain and have high-value entrepreneurship. The correlation coefficient of the relationship between the part of the group and the empowerment of beef cattle farmers is 0.674. In conclusion, the relationship is quite strong between the two variables. The role of the group is not optimal either as a place of learning, a place of business, or a place to work together, which requires the involvement of the Cirebon Regency agriculture office, educational institutions, and private institutions to be involved in developing the role of groups in Cirebon Regency.

Conclusions: The empowerment of farmers in this study measures aspects, namely, 1) the role of the group is not optimal, while 2) the ability of farmers to maintain entrepreneurship is of high value. The correlation coefficient of the relationship between the role of the group and the empowerment of beef cattle farmers is 0.674. It indicated that the relationship is quite strong between the two variables.

Keywords: Empowerment; Group role; Livestock farmer group

INTRODUCTION

The beef cattle business is a business opportunity for livestock because the Cirebon area has culinary tourism with meat raw materials. Thus, the demand for beef in the Cirebon Regency increases every year. This beef cattle business is still 90% managed by smallholder farms [1]. Smallholder farms in Indonesia have several prominent characteristics, namely, a) the level of livestock ownership is relatively few, b) the use of technological inputs and innovation is relatively limited, and c) it relies on feed needs from the natural surroundings, especially for ruminant livestock in the provision of forage that is only sufficient for a day (cut and carry) [2]. The development of beef cattle is related to the role of livestock farmer groups. Therefore, a practical approach is needed so that livestock farmer groups can take advantage of sustainable development programs by fostering a sense of belonging, participation, and creative development, accompanied by the support of other surrounding communities [3].

Farmer groups consist of 10-25 people who form a forum based on shared interests related to environmental conditions (social, economic, resources) and harmony led by a chairman they appoint [4]. A livestock farmer group consists of three to 20 respondents with the aim or intent of forming a group, namely, 1. the group is formed with a specific purpose and purpose, 2. the group is formed spontaneously, 3. A group of individuals becomes a group because they are treated the same by the respondent. The dynamics of this group must have several requirements, namely, a) group vision and mission, b) organizational structure, c) functions and tasks of group organizational structure, d) group development by holding regular meetings and member fees, e) cooperation between non groups dominated by the chairman, f) group atmosphere, g) group pressure, h) group effectiveness, and i) hidden intent [5]. The role of farmer groups is as a strategic forum for farmers to identify the part of groups and a vehicle for cooperation between the member of the beef cattle farmers group by establishing business partnerships with related institutions and as a medium for transferring technology and information [6].

The Cirebon Regency is an eastern region of West Java Province. The Cirebon Regency has a strategic area where this region has a port toll road and is close to Kertajati Airport in Majalengka. Apart from being an industrial city, the Cirebon Regency is also a center for agriculture, especially in the marine sector. In contrast, the livestock sector does not yet make a contribution like the marine sector, which can contribute to the GRDP of the Cirebon Regency. The existence of culinary tourism "Empal Gentong and Empal Asem using beef as raw material, is an opportunity and opportunity for beef cattle business in Cirebon Regency.

The population of beef cattle in 2019 in the Cirebon Regency was 4589 heads, while beef production in the Cirebon Regency 2019 was 3,694,276 kg; this is high compared to the existing cattle population [7]. Beef production in Cirebon Regency of 3,694,276 kg comes from imported meat and cattle outside the Cirebon area to meet beef needs in Cirebon Regency. The Cirebon Regency has livestock farmer groups that are assisted and under the supervision of the Cirebon Regency Agriculture Office, namely, five livestock farmer groups. Cattle farmer groups have a strategic role in encouraging the achievement of the area to become a beef cattle agribusiness center, so it is very relevant if a study is carried out that focuses on the role of groups in empowering beef cattle farmers who are members. The results of this study will also help map out what things need more attention so that groups can play an optimal role in empowering beef cattle farmers in the Cirebon Regency. The research aims 1. The role of farmer groups in their function as a place of learning, production sites, and a residence for cooperation and member business, 2. the empowerment of beef cattle farmers, 3. the relationship between the role of the group and the appointment of beef cattle farmers in the district. Cirebon with the research title The Role of Livestock Farmer Groups in Developing the Empowerment of Beef Cattle Fattening Business in Cirebon Regency.

MATERIALS AND METHODS

Time and location of research

The study was conducted in five Livestock Farmer Groups (KTT) in the Cirebon Regency, including the eastern, central, and western regions for two months from August to September 2021.

Research method

The research was conducted at the Livestock Farmers Group (KTT) of Cirebon Regency, covering the eastern, central, and western regions for two months, from August to September 2021. The research method used survey methods and field observations by distributing questionnaires and interviews to farmers as respondents. The selection of respondents used purposive sampling. Farmer

respondents have the following requirements: 1. Beef cattle raising were a fattening business; 2 ownership of at least three cattle; 3. Join a livestock farmer group. The data used are primary data and secondary data. We collected the preliminary data from interviews and gave a list of questions to respondents. The questions consisted of 1) breeder characteristics: age, education level, gender, livestock experience, livelihood, motivation to raise livestock, and the number of animals. 2) maintenance techniques (output of labor, maintenance methods, length of maintenance). 3) Business capital for beef cattle fattening consists of fixed capital (construction of sheds, equipment, and economic matter) while the current capital is 1. cattle breeds comprising the initial weight, final weight, cattle buying and selling prices, 2. Feed, including the amount and the feed price, both forages and concentrates, 3. the amount and the cost of vitamins and medicines are given 4. Labor, 5. Marketing and transportation costs. Secondary data is supporting data related to the problem studied, obtained from scientific journals and libraries.

The method of selecting the samples of farmer respondents was taken by snowball sampling with the number of farmer respondents in the Cirebon Regency set at 60 beef cattle fattening farmers. Snowball sampling is sampling from a population whose members are not clear. The number is uncertain (hiding population) by finding one sample and then looking for information from the sample regarding the existence of other examples and so on in succession [8].

Calculation of the sample of farmer respondents:

Formula Lemeshow 1997:

$$n = \frac{Z^2 p(1-p)}{d^2}$$

Information:

n : number of samples

z : standard value = 1,96

p : maximum estimate = 50% = 0,5

Asumption:

- z:95% = 1,96
- p:20%
- d:10%

Then, the calculation result is:

•
$$n = \frac{z^2 p(1-p)}{d^2}$$

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•
$$n = \frac{1.96^2 \ 0.2(1-0.2)}{0.1^2}$$

• n = 62 = 60

Data analysis

Data analysis used primary data and secondary data. Preliminary data were obtained from interviews through questionnaires given to respondents. Secondary data can be obtained from journal references. Data analysis used the Spearman rank correlation test to measure the closeness of the variables. The observed variables were the role of the group as the independent variable (X) and farmer empowerment as the dependent variable (Y).

The variables that will use are Group Role as the independent variable and Farmer Empowerment as the dependent variable. Group Role Variables include:

- 1. Role as a place of learning, namely, the level of the role performed by the group in facilitating its members to improve their knowledge, attitudes, and skills. The indicators consist of:
 - a. Regular and ongoing meetings,
 - b. Leadership cadre development,
 - c. Facilitation of communication with information and technology sources,
 - d. Training administration.
- 2. The role as a place of production, namely, the level of functions performed by the group in encouraging the achievement of an efficient business scale. The indicators consist of:
 - a. Group facilitation in planning business patterns
 - b. Facilitation in the preparation of plans for the provision of production inputs
 - c. Facilitation in the application of technology and zootechnical aspects
- 3. Role as a place of business, namely, the level of the role played by the group in finding and taking advantage of opportunities for the success of the member's livestock business. Indications:
 - a. Facilitation of the provision of production inputs,
 - b. Capital facilitation, and
 - c. Marketing facilitation.
- 4. The role as a place of cooperation, namely, the level of the group's role in encouraging

collaboration between members and outside the group. Indicators:

- a. Group management collaboration,
- b. Capital cooperation,
- c. Cooperation with outsiders.

Farmer Empowerment Variables include:

- Empowerment of breeders as livestock keepers, namely, the level of development of the ability of farmers to master and implement technical aspects of raising livestock. The indicators consist of:
 - a. Selection procedure,
 - b. Animal feed management,
 - c. Maintenance management,
 - d. Management of equipment and cages,
 - e. Marketing management.
- 2. The empowerment of farmers as managers are the level of development of farmers' ability to make decisions to achieve the success of their business. The indicators consist of:
 - a. Details of business objectives,
 - b. Preparation of business development priorities,
 - c. Learning development.

The measurement method for each variable indicator was carried out with an ordinal scale. Class categories for group roles are:

- 27, 00 39,00: high group role
- 14.00 26.00: enough group role
- 0.00 13.00: low group role

Class categories for farmer empowerment are as follows:

17.00 – 24.00: high farmer empowerment

9.00 – 16.00: The difference in breeders is enough 0.00 – 9.00: Low farmer empowerment

Spearman correlation analysis

The data and information collected from the interviews of the selected respondents are then processed and analyzed with the following procedure: descriptive analysis, which describes the characteristics of the observed variables, and nonparametric statistical analysis, which determines the value of the relationship between group roles and empowerment and breeder. This analysis uses the SPSS (Statistical Package for Social Science) program version 26. According to Dergibson (2006), the analytical technique used to measure the closeness of the relationship between variables is the spearman rank correlation test with an ordinal minimum measurement scale. The Spearman rank correlation formula is as follows:

$$rs = 1 - \frac{6 \sum d^2}{n (n^2 - 1)}$$

Explanation:

 $\begin{array}{ll} rs & = Spearman \ correlation \ coefficient \\ \sum d^2 & = Total \ squared \ difference \ between \ rankings \\ N & = Number \ of \ research \ samples \end{array}$

RESULTS

Respondent characteristics

The response characteristics discussed in this study include 1) education level, 2) age, 3) the main occupation, 4) livestock ownership, and 5) experience in raising livestock. The most dominant level of education was a primary school (68.66%). This result depicts that the respondent group members have a low level of education (Primary School), which can be seen more clearly in Table 1. The age of the respondents is divided into two groups, namely, 1) ages ranging from 25-50 years at 70.15% and 2) aged > 50 years at 29.85% (Table 1). These results indicated that members of the livestock group are more dominant at productive age (25 -50 years), where energy, time, and the five senses are still functioning well. The primary workers of the members of the most dominant group are livestock with cattle farms (52.24%). These results indicate that raising cattle is not only a sideline but also a profit-oriented business.

The most dominant livestock ownership ranged from 1 to 5 heads of 74.63%. These results indicate that members of the livestock group are more predominant to the right of 1-5 leaders. The length of experience raising group members 1-5 heads is 38.81%, the rest is more than 6-15 years, and > 15 years is 61.19%. These results indicate that with a long experience of raising livestock, more than 6-15

Table 1. Characteristics Respondent (Source of Processed Questionnaire data for 2021)

Description	Responden	Persentase
Respondent Education Level		
No school	1	1.49
Primary School	46	68.66
Public Middle School	8	11.94
Senior High School	11	16.42
University	1	1.49
Total	67	100
Age		
25 - 50 tahun	47	70.15
> 50 Tahun	20	29.85
Total	67	100.00
Main Worker		
Cattle farm	35	52.24
Farmer	16	23.88
etc.	16	23.88
Total	67	100
Livestock ownership		
1-5 cattle	50	74.63
6 -10 cattle	11	16.42
11 - 15 cattle	5	7.46
> 20 cattle	1	1.49
Total	67	100.00
Farming Experience		
1 - 5 years	26	38.81
6 - 10 years	17	25.37
11 - 15 years	16	23.88
> 15 years	8	11.94
Total	67	100.00

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years and >15 years can increase their knowledge, skills, and information. Nevertheless, knowledge of livestock rearing is obtained from generation to generation without any increase in the use of technology.

These results indicate that with a long experience of raising livestock, more than 6-15 years and >15 years can increase their knowledge, skills, and information. Nevertheless, knowledge of livestock rearing is obtained from generation to generation without any increase in the use of technology. The majority of livestock experience is more than 20 years, where livestock experience can affect the ability to manage a livestock business; with long experience, farmers better understand the livestock business they run. [9].

Group role

The role of the group as a place of learning consists of three categories, namely, low, sufficient, and high (Table 2). This low score is nine respondents with a percentage of 13.43%, a good value is 33 respondents with a rate of 49.25%, and a high value is 25 respondents with a percentage value of 37.31%. From this result, we considered that groups' role in the Cirebon Regency as a place of learning is sufficient. Group members share knowledge, skills, and information about livestock rearing with other group members. However, the closest respondents and agreement with group members are still limited. The role of the group as a place of production consists of three categories, namely, low, moderate, and high (Table 2). This low score is 15 respondents with a percentage of 22.39%, a sufficient value is 33 respondents with a rate of 49.25%, and a high value is 19 respondents with a percentage value of 28.36%. We assumed that the role of groups in the Cirebon Regency as a place of production is sufficient, where group members have not been optimal in group activity programs in providing production infrastructure for the beef cattle business.

Farmer empowerment

The empowerment of farmers as livestock keepers consists of three categories, namely, low, sufficient, and high (Table 2). This low score is 13 respondents with a percentage of 19.40%, a good value is 25 respondents with a rate of 37.31%, and a high value is 29 respondents with a percentage value of 43.28%. It means that the empowerment of farmers in the Cirebon Regency as livestock keepers is high, where 29 member respondents understand and know how to choose good livestock, good concentrate feed for livestock, and suitable cages.

The empowerment of farmers as managers consists of three categories, namely, low, sufficient, and high (Table 2). This low score is 15 respondents with a percentage of 22.39%, a good value is 17 respondents with a rate of 25.37%, and a high value is 35 respondents with a percentage value of

Description -	Low		Medium		High	
	Respondent	(%)	Respondent	%	Respondent	%
Group Role						
A place to learn	9	13.43	33	49.25	25	37.31
production	15	22.39	33	49.25	19	28.36
business	15	22.39	52	77.61	0	0
A place for						
collaboration	4	5.97	63	94.03	0	0
Group Role	11	16.04	45	67.54	11	16.42
Farmer						
Empowerment						
herdsman	13	19.40	25	37.31	29	43.28
Manager	15	22.39	17	25.37	35	52.24
Farmer						
Empowerment	14	20.85	21	31.34	32	47.76

Table 2. Group Role and Farmer Empowerment (Source of Processed Questionnaire data for 2021)

52.24%. We determined that the empowerment of farmers in Cirebon Regency as livestock managers is high, where 35 member respondents understand and know how to be good managers.

Role and empowerment relationship

The correlation coefficient of the relationship between the role of the group and the empowerment of beef cattle farmers is 0.674. It implies that the relationship is quite strong between the two variables. Because the more members of the group carry out their respective roles with full responsibility, the more empowered the breeders of the group members tend to be.

DISCUSSION

These results indicate that most breeders are still less educated, which affects their ability to capture information about good farming practices. Formal education taken by members of livestock farmer groups will provide an essential role in problem-solving livestock business management skills and influence the absorption of the knowledge and information conveyed [2]; [10]; [11] and [6]. The need for assistance and the level of education of group members have an essential role because it affects the ability to capture information and ways of thinking in solving problems. Therefore, members of livestock farmer groups in the Cirebon Regency conveyed that they need repeated information and regular assistance.

The most dominant age ranges from 25-50 years by 70.15% (Table 2); the respondents are more prevalent in the productive age (25-50 years), where energy, time, and the five senses are still functioning well. The formative period provides opportunities to accept innovations given to respondents classified as highly more responsive to develop their potential in learning. A relatively young and still productive person will have a better rate of speed in learning problems, excellent physical strength, and enthusiasm to learn to develop a cattle fattening business [2]; [12]; [6] and [5].

The most dominant livestock ownership ranged from 1 to 5 heads of 74.63%. The number of livestock ownership is very significant to

farmers' ability, which means the more they keep the livestock, the higher the ability to raise livestock. Limited capital (considering the costs incurred) and a lack of knowledge of management and technology cause limitations on livestock ownership. This limited ownership of 1-5 animals makes farmers receive low income and not use this as the primary income but as part of mixed farming [12]; [9]; [2] and [5].

The results of this study are different from the studies by [13] and [14], who say that farmer groups with a function as a learning class at the research site have a good or high enough role in their farmer groups. The role of the group as a place to learn is worth enough for 33 respondents, with a percentage of 49.25%, where group members share knowledge, skills, and information about livestock raising with other group members. However, the closest respondents and agreement with group members are still limited. The farmer group includes several aspects of production technology. The farmer group must be able to apply a business process consisting of selecting superior breeds, improving the quality of feed quality and livestock raising techniques, and strengthening the institution's marketing.

The role of the farmer group includes several aspects of production technology there. The farmer group must be able to implement business process that consists of selecting superior breeds, improving the quality of quality feed and livestock raising techniques, and strengthening institutions and marketing [14]. The role of the group as a place of learning is worth enough for 33 respondents, with a percentage of 49.25%, where group members share knowledge, skills, and information about livestock rearing with other group members. The results of this study are different from the research [13], who says that farmer groups with a function as a learning class at the research location have a good or high enough role in their farmer groups.

The role group as a place of production has sufficient value for as many as 33 respondents, with a percentage of 49.25%, meaning that the role of groups in Cirebon Regency is adequate. Group members make group activity programs in providing production infrastructure facilities for the beef cattle business. Enough to meet the needs of group members. The roles of the group as a production unit are as follows: (1) the group has been able to facilitate the planning of business patterns, and (2) the group has been able to facilitate the preparation of the plan for the supply of production factors. Group facilitation in the zootechnical aspect, farmer groups, generally has sufficiently facilitated farmer members to carry out beef cattle maintenance properly. The member cows are put together in the sheds area. In this way, it is expected that farmers will see each other or pay attention to cows that are well cared so that it will encourage the success of other farmers in raising their beef cattle [15] and [2].

The role of the group as a place of business has a sufficient value of 52 respondents, with a percentage of 77.61%. It means that the role of the group in Cirebon Regency as a place of business is adequate, where group members are enough to raise livestock. The part of the group in the marketing session is to sell their livestock using the *jogrokan* system (the interpretation of the cow's body weight) multiplied by the live body weight per kg. At the same time, it is different for each member for consumers. The role of the group as a place of business is as a place of marketing that can help its members sell cattle at a satisfactory price [2].

The role of the group as a place of cooperation has sufficient value for as many as 63 respondents, with a percentage of 94.03%. We consider that the role of groups in the Cirebon Regency as a place of cooperation is sufficient. It is not optimal for group members to collaborate with the Cirebon Regency agricultural office, educational institutions, or home industries (e.g., making tofu, tempeh, or soy sauce). Processed residues (tofu, tempeh, and soy sauce) can be used to provide concentrate feed for beef cattle. The capital cooperation that developed in the group was by sparing Rp. 500,000 per member for each sold cattle to be given to the group to be used for electricity costs, water costs, transportation costs for buying cattle, and costs for repairing damaged sheds. The role of the group as a place of cooperation in management is entirely running, although the part of the group leader is still dominant. The capital cooperation that has developed is, among others, the provision for the cattle sale. After deducting the cost of goods, the price of each cow sold is 70% given to the farmer. The remaining 30% is returned to the group with the allocation of the proportion of funds, 20% for development facilities in the group, 5% for operational costs, and 5% for group cash [2].

The role of the group is not optimal either as a place of learning, a place of business, and a place to work together; this requires the involvement of the Cirebon Regency agriculture office, educational institutions, and private institutions to be involved in developing the role of groups in Cirebon Regency. The group functions as a learning class, a production unit, a vehicle for cooperation, and a business group. The development of livestock farmer groups is to raise awareness of the farmers, where the existence of livestock farmer groups is carried out from, by, and for farmers. Therefore, the development of farmer groups needs to be carried out with a participatory feel so that principles, equality, transparency, responsibility, accountability, and cooperation become new content in farmer empowerment [16]; [17] and [18].

The empowerment of farmers in this study measures two aspects: the ability of farmers to maintain entrepreneurship as explained below. These two aspects look at and measure three elements: knowledge, attitude tendencies, and skill levels. The assignment of farmers as livestock maintenance has a high value of 29 respondents, with a percentage value of 43.28%. It suggested that the empowerment of farmers in Cirebon Regency as livestock keepers is high, where 29 respondents understand and know how to choose good feeders, good concentrate feed for livestock, and suitable sheds. The level of empowerment of farmer group members is measured by the ability of farmers to be entrepreneurial and independent. Farmers can use this ability to improve their business and their standard of living [19] and [20].

The empowerment of farmers as managers has a high score, confirmed by as many as 35 respondents (52.24%). It indicates that the assignment of farmers in the Cirebon Regency as livestock managers is high, where 35 of the respondents understood and knew how to be good managers. A good manager is reflected by the farmer's perspective of maintenance management, paid attention to feed management, selection of feeders, and livestock health management. The marketing management respondents routinely sell their livestock for the Eid or Hajj holidays. Consumers who continue to buy beef cattle from each respondent can determine their selling price with the *jogrokan* system (estimated live weight multiplied by live bodyweight price).

The role of the farmer as a manager is sufficient. It is due to the following: 1) The average number of livestock owned is only three heads. 2) Limitations in providing forage. 3) Strategic land ownership to raise beef cattle. 4) Farmers are more focused on routine activities in the group. 5) Farmers were not proactive in participating in training activities, except as group representatives. They increase the empowerment of farmers through programs provided to recipients and program providers and the role of institutions that can help farmers [2] and [21].

Farmer empowerment serves to change a person by developing the capabilities, especially the individual's knowledge of accessing existing information sources. Farmers must own three things: 1) The ability to aspire. 2) The courage to convey the rationality of ideas. 3) The independence of farmers [22] and [23].

The correlation coefficient of the relationship between the role of the group and the empowerment of beef cattle farmers is 0.674. We considered that the relationship is quite strong between the two variables. The positive correlation value (0.53) indicates that the role of the group that has been running well is in its function as a learning class and a production unit. Both groups function well, so it can encourage farmers to increase their knowledge, attitudes, and skills. Since the more group members carry out their respective roles with full responsibility, the more empowered the members of the farmer groups [2].

CONCLUSION

Based on the results and discussion above, it indicates that the empowerment of farmers in this study measures aspects: 1) the role of the group is not optimal, while the ability of 2) farmers to maintain entrepreneurship is of high value. The correlation coefficient of the relationship between the role of the group and the empowerment of beef cattle farmers is 0.674, and in conclusion, the relationship is quite strong between the two variables.

CONFLICT OF INTEREST

Regarding the content presented in the book, the authors declare no conflict of interest with any financial organization." The authors identify and confirm any personal circumstances or interests that might be seen as improperly impacting the depiction or interpretation of the submitted study findings. The role of the funders was not involved in the study design, data collection, analysis, or interpretation, article preparation, or the decision to publish the findings."

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REFERENCES

- Sahala, J., R. Widiati, dan E. Baliarti. 2016. Analisis kelayakan finansial usaha penggemukan sapi simmental peranakan ongole dan faktor-faktor yang berpengaruh terhadap jumlah kepemilikan pada peternakan rakyat di kabupaten karanganyar. Buletin Peternak. 40(1): 75-82. Doi: 10.21059/ buletinpeternak.v40i1.9823
- Mauludin M. A., S. Winaryanto, dan S. Alim. 2012. Peran kelompok dalam mengembangkan keberdayaan peternak sapi potong (kasus di wilayah Selatan Kabupaten Tasikmalaya). J. Ilmu Ternak. 12(2): 1-8. Doi: 10.24198/jit.v12i2.5120
- Muslim, C. 2006. Peranan kelompok peternak sapi potong dengan pendekatan sistem integrasi padi ternak (sipt) di nusa tenggara barat, jawa timur, dan jawa barat. SOCA: J. Sos. Ekonomi Pertan. 6(3): 1-17.
- Runtunuwu, O., B. F. J. Sondakh, B. Rorimpandey, dan F. N. S. Oroh. 2016. Dinamika kelompok tani ternak sapi lm3 di desa pinapalangkow kecamatan suluun tareran. J. Zootec. 36(1): 1-12. Doi : 10.35792/ zot.36.1.2016.9277

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- Falo, M. 2016. Kajian dinamika kelompok tani usaha ternak sapi potong di kelompok tani nekmese desa manusasi kecamatan miomaffo barat. Agrimor. 1(01): 15-18. Doi: 10.32938/ag.v1i01.27.
- Mutiah, A. A. Abdullah, dan S. Nurlaelah. 2018. Identifikasi peranan kelompok sebagai wahana kerja sama pada kelompok peternak sapi potong pada peternakan rakyat. J. Agripet. 18(1): 57-62. Doi: 10.17969/agripet. v18i1.10971
- 7. BPS. 2020. Kabupaten Cirebon Dalam Angka Cirebon Regency. Cirebon.
- Hardani, H. Andriani, J. Ustiawaty, E. F. Utami, R. R. Istiqomah, R. A Fardani. D. J. Sukmana, and N. H. Auliya. 2020. Buku metode penelitian kualitatif & kuantitatif. CV Pustaka Ilmu, Yogyakarta.
- Indrayani, I. dan Andri. 2018. Faktor-faktor yang mempengaruhi pendapatan usaha ternak sapi potong di kecamatan sitiung, kabupaten dharmasraya. J. Peternak. Indonesia. 20(3): 151-159. Doi: 10.25077/jpi.20.3.151-159. 218
- 10. Siswoyo, H., D. J. Setyono, dan A. M. Fuah. 2013. Sumedang provinsi jawa barat (studi kasus di kelompok peternak kambing simpay tampomas kecamatan cimalaka sumedang). J. Ilmu Produksi dan Teknologi Has. Peternak. 01(3): 172-8.
- 11. Ningsih, R. 2017. Peranan pendidikan kewirausahaan dalam meningkatkan motivasi berwirausaha bagi mahasiswa. Prosiding LPPM Universitas Indraprasta PGRI. 2(3): 60.
- Apriyanto, L. A., Irdaf, dan A. E. Kusumastuti.
 2016. Peranan kelompok peternak sapi potong Satwa Mulya terhadap keberdayaan rumah tangga peternak di Desa Brajan, Kecamatan Mojosongo, Kabupaten Boyolali Jawa Tengah. J Ilmu-Ilmu Peternak. 26(3): 79-90. Doi: 10.21776/ub.jiip.2016. 026.03.10
- 13. Mutmainah, L., I. R. Levis, dan I. Sinu. 2021. Peranan kelompok tani dalam meningkatkan pendapatan petani padi sawah di Kelurahan Tuatuka Kecamatan Kupang Timur Kabupaten Kupang. Buletin Ilmiah IMPAS. 2(1): 64-73. Doi: 10.35508/impas.v22i1.4217
- Hasnawati, A. Fariyanti, dan S. Mulatsih S. 2019. Peranan kelompok peternak dalam menunjang keberhasilan usaha sapi potong di Kabupaten Boalemo. J. Manaj. Pembang. Drh. 6(2): 81-102. Doi: 10.29244/jurnal_mpd. v6i2.25107

- Abdullah, A. 2008. Identifikasi kelas kemampuan kelompok tani ternak di Kecamatan Herlang Kabupaten Bulukumba. J. Ilmu Ternak. 8(1): 77-82. Doi: 10.24198/ jit.v8i1.2218
- 16. Suzeth, G., Tinenta, S. O. B. Lombogia, F. S. Oley, dan J. M. Tumewu. 2017. Peranan kelompok peternak terhadap usaha pengembangan ternak itik di Kecamatan Tondano Barat Kabupaten Minahasa. Zootec. 37(2): 415-425. Doi: 10.35792/zot.37.2.2017.16267
- 17. Fikri, M. R. A. 2021. Faktor-faktor yang mempengaruhi peranan kelompok tani dalam penerapan teknologi budidaya cabai di lahan pasir pantai Kabupaten Progo. Agrimanex. 1(2). Doi : 10.35706/agri manex.v1i2.5120
- 18. Sulistyati, M. Herlina, L dan Nurachman, S. 2011. Dampak proses pemberdayaan terhadap keberdayaan peternak domba (influence process of empowerment to empowered sheep farmers). 11(2). 927. Doi: 10.24198/jit.v11i2.383
- Islamiyah, C., dan S. Azizah. 2019. Peran penyuluh peternakan dalam pemberdayaan anggota kelompok ternak kud sumber makmur Ngantang. Pros. Semin. Nas. Teknologi Peternak. dan Vet. 2019. 803-813. Doi: 10.14334/pros.semnas.tpv-2019-p.803-813
- 20. Mutmainah, R., dan Sumardjo. 2014. Peran kepemimpinan kelompok tani dan efektivitas pemberdayaan petani. J. Sosiol. Pedesaan. 02(03): 99-182. Doi: 10.22500/sodality.v2i3. 9425
- 21. Yunasaf, U., A. S. Masdar, dan S. Alim. 2011. Hubungan keberdayaan peternak sapi perah dengan tingkat keberhasilan usaha ternak (correlation between dairy farmer's power and level of farming succeeding). J. Ilmu Ternak Universitas Padjajaran. 11(1). Doi: doi.org/10.24198/jit.v11i1.403
- 22. Rohman, A. S., dan Sukaesih. 2017 Transformasi perpustakaan desa untuk pemberdayaan masyarakat: studi kasus di desa margamukti - pangalengan bandung. J. Perpust. Pertan. 26(2): 47. Doi: 10.21082/ jpp.v26n2.2017.p47-54
- 23. Wulandari, S. L., dan S. Subekti. 2020. Pemberdayaan peternak sapi potong menuju kemandirian. J. Kirana. 1(1): 3145. Doi: 10. 19184/jkrn.v1i1.19472.