

Socio-Economic Profile of Beef Cattle Farmers in Kediri Regency, East Java Province

Nur Solikin^a, Budi Hartono^b, Zaenal Fanani^c, Muhammad Nur Ihsan^d,
^aDoktor Program of Faculty of Animal Husbandry, Universitas Brawijaya Malang, ^{b,c,d}Faculty of Animal Husbandry, Universitas Brawijaya Malang,
Email: gatokoco.80@gmail.com

In developing livestock sector in Kediri Regency, a study concerning socio-economic profile of beef cattle farmers in Kediri Regency, East Java Province is needed in order to clearly describe the fact and to obtain the appropriate strategy formulation. This research aims to describe the socio-economic condition of the farmers, especially in Kediri Regency, East Java Province. The implementation time of the research was from January to June 2018. Data collection used survey method and secondary data derived from references published by the local government of Kediri Regency. This research is a case study research. Eight districts were chosen as the samples by using multistage sampling method. The data set obtained later was then described. According to the result of this research, it is necessary to elevate socio-economic condition of the farmers in the future. The strategy which can be applied is in the form of a strengthening through beef cattle development training with contemporary management so that farming is no longer considered as a side business. In addition, the role optimization of stakeholders as partners in the development of beef cattle farming in Kediri Regency is also needed.

Key words: *Socio-Economy, Farmers, Beef Cattle, Kediri Regency.*

Introduction

There are still problems in the availability of beef cattle in Indonesia that lies in supply shortages every year. While, the rate of consumption and population growth cannot be balanced by the rate of beef cattle population increase, the impact that arises in this situation forces Indonesia to always import, both in the form of meat and live cattle.

According to the results of the research (Priyanto, 2011), it is stated that the rate of beef demand has increased sharply in line with population growth, improvement in per capita income, and

changes in consumer tastes. However, until now, Indonesia is still a net importer of beef because 35% of the supply is fulfilled from the import sector. Therefore, the effort to achieve self-sufficiency in meat requires the development of community livestock farming by utilizing local resources.

The contribution of the agricultural sector, especially livestock farming to developing countries such as Indonesia is still very influential on state revenue. The development of the livestock sector is the hope of many parties with the aim of being able to answer the problem of a balance between the needs compared to the availability of domestic beef production.

Kediri Regency contributes to providing beef in East Java and even nationally, but a strategy is needed by policymakers in innovating beef cattle development planning strategies. Based on geographic data (2017), Kediri Regency is surrounded by 5 (five) Regencies with borders, namely Nganjuk and Jombang Regencies in the north, Blitar and Tulungagung Regencies in the south, Tulungagung and Nganjuk Regencies in the west, and Jombang and Malang Regencies in the east. The comparison between beef cattle population and the total area of the districts in Kediri Regency will show the level of livestock density. The level of livestock density in a district in Kediri Regency is calculated by using livestock units (ST) per square kilometre (km²) of land available in each region. Kediri Regency has an overall average density level of 1.53 ST/km². These numbers were obtained from the total number of livestock as many as 212.376 divided by the area of Kediri Regency which is 138.605 km².

According to Mayulu, Sunarso, Sutrisno, & Sumarsono (2010), the increase of the Indonesian demand for beef is also one of the opportunities for the development of beef cattle fattening business in Indonesia. Indonesian demand for beef continues to increase along with the increase in population and people's purchasing power, lifestyle changes, and the increase of awareness of the importance of fulfilling balanced nutrition.

The community's livestock farming business is subsystemic and has not yet reached economies of scale. The low level of livestock productivity is more likely to be caused by the lack of business capital or the lack of opportunity to obtain capital in business development. According to Siregar (2012), agriculture and livestock farming business are often considered as businesses which are riskier in terms of *output* and price changes, as well as the effect of weather on the entire production process. Human resources in livestock farming consisting of farmers, communities, and the role of the government are important factors besides natural resources consisting of land, feed, livestock germs, and technology to achieve the goal of livestock farming success

The socio-economic aspects of beef cattle farmers in Kediri Regency have become important parts that need to be studied in order to know more about the existing conditions which are categorized as important in formulating a strategy for beef cattle business development with the main goal of creating a synergy between economic and general development.

The community's livestock farming business has an important role in national economic development, especially in providing jobs/opening employment opportunities, increasing public opinion, and strengthening national industries. The ability of local governments in utilizing strengths, reducing threats and weaknesses, and taking business development opportunities that are supported by local resources is one of the considerations in formulating regional development policies and planning beef cattle agribusiness development *holistically*.

Materials and Methods

Materials

Socio-economic aspects included were the number of residents, the number of residents based on their age, level of education, experience of raising livestock, number of livestock ownership, and the income of livestock farmers.

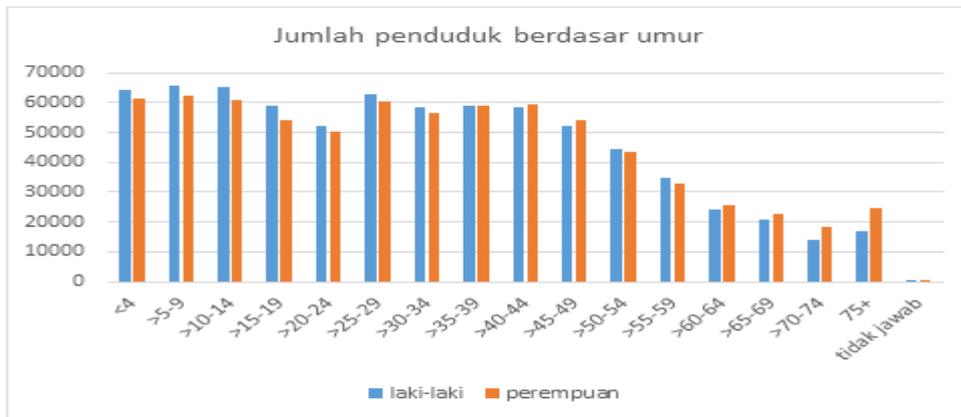
Methods

The method used in determining the location of research was *multistage sampling method*, starting from the regency, district, to village. The research was conducted using a survey method namely describing the problem as it is and based on ongoing facts. Primary data were obtained directly from the sources such as data, interviews and opinions. Primary data were in the form of strategies implemented in the beef cattle business by the community of Kediri Regency. The data set was then described.

Results and Discussion

According to the general condition, the air temperature in Kediri Regency is between 23⁰C to 31⁰C with an average height of 81 meters above sea level. Based on the types of soil in Kediri Regency, the soil can be divided into 5 (five) soil classes/types, namely 1) greyish brown regosol with an area of 77,379 Ha or 55.84% located in the Districts of Kepung, Puncu, Ngancar, Plosoklaten, Wates, Gurah, Pare, Kandangan, Kandat, Ringinreja, Kras, Papar, Purwoasri, Pagu, Plemahan, Kunjang and Gampengrejo, 2) greyish brown alluvial covering an area of 28,178 Ha or 20.33% is the type of soil found in the Districts of Ngadiluwih, Kras, Semen, Mojo, Grogol, Banyakan, Papar Tarokan and Kandangan, 3) yellowish brown andosol covering an area of 4,408 Ha or 3.18%, found at an altitude area above 1,000 from sea level (asl) located in the Districts of Kandangan, Grogol, Semen and Mojo, 4) reddish brown mediteran, grey grumosol covering an area of 13,556 Ha or 9.78% found in the Districts of Mojo, Semen, Grogol, Banyakan, Tarokan, Plemahan, Pare and Kandangan, 5) reddish brown lithosol covering an area of 15,066 Ha or 10.87% found in the District of Semen, Mojo, Grogol, Banyakan, Tarokan and Kandangan.

Chart 1. The Number of Residents Based on Age Group

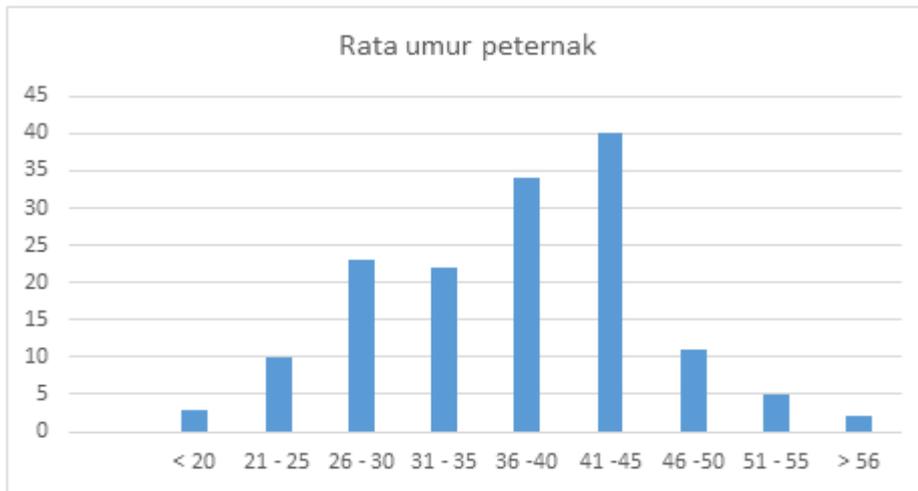


In 2017, Central Bureau of Statistics of Indonesia recorded that based on the total number of population, the population of Kediri Regency was 1.566.598 people, consisting of 790.677 men and 775.919 women. Based on the age group, the population composition of Kediri Regency consisted of 58.61% or 911.020 people aged 15-54 years, 24.48% or 380.507 people aged 0-14 years and 16.91% or 262.858 people aged 55 years and older. The population density of Kediri Regency has reached 1.121 people/km² with the highest population density in Ngasem District which was 3.056 people/km².

Based on the age category, the population of Kediri Regency aged 0-14 years was 380.044 people or around 25 percent, the productive age (15-54 years) population was 884.261 people or 59 percent, and the population of people aged above 55 years was 235.281 people or equal to 16 percent. From the data, it can be defined that the number of workers in Kediri Regency is high so that a place that can be used to accommodate them is needed. With the increasing number of existing population, the fulfillment of beef demand is affected, meaning that the development of beef cattle in Kediri Regency will have the opportunity to supply protein sources for the community.

According to Baba, Dagong, & Risal (2014), it is revealed that people with productive age are people aged 10-59 years who can play a role in helping to work on agricultural land. And the age of farmers which is 50 years and over is the age of someone to think and act carefully because the physical condition and mind are good enough. According to Adiwilaga (1973), it is stated that livestock farmers who are at productive age will be more effective in managing their business compared to older livestock farmers.

Chart 2. Age Category of Livestock Farmers in Kediri Regency



In 2016, according to the data of Kediri Regency population, it was recorded that 34.73% of the population were elementary school graduates, 5.76% were bachelor degree (S1) graduates, 1.29% were D1-D3 graduates, 3.96% was D4/S1 graduates, and 0.51% was S2/S3 graduates. The education level of the people is one indicator of the quality of human resources because the higher education owned by people of an area reflects the quality of the population. Human resource contributes to the development aspect. Chart 2 shows the number of livestock farmers based on the experience of their formal education level. Elementary School (SD) graduates are 22%, junior high school graduates are 43%, senior high school graduates are 29%, and bachelor degree graduates are 7%. The level of education affects a person's ability to follow developments. This is in line with Ternak, Potong, Desa, Kecamatan, & Gresik (2015) that states that livestock farmer's education has a significant influence on the understanding of livestock reproduction.

Chart 3. The Education Level of Livestock Farmers in Kediri Regency

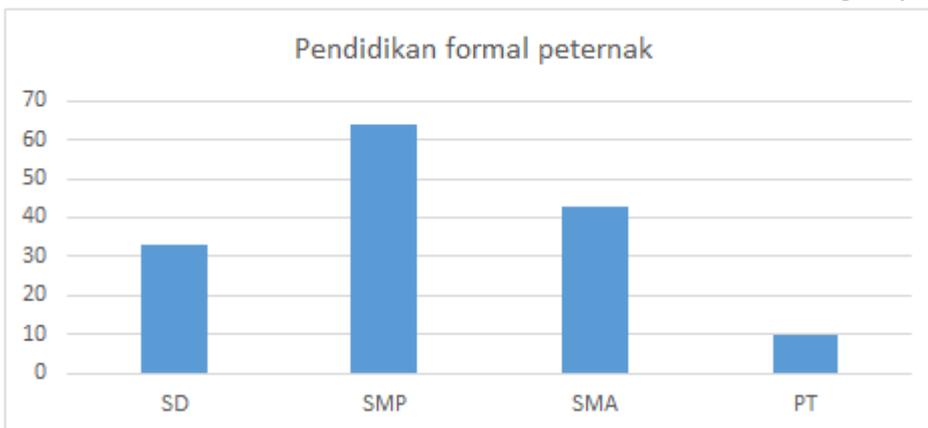


Table 1: The Occupation of Respondents

| Occupation | Total Number | |
|---------------------------|--------------|------------|
| | (people) | Percentage |
| Farm Worker | 46 | 31% |
| Farmer | 60 | 40% |
| Entrepreneur | 15 | 10% |
| Trader | 19 | 13% |
| Livestock Farmer | 3 | 2% |
| Civil Servant/Police/Army | 7 | 5% |

The percentage of qualification of human resources who choose to be involved in livestock farming business is dominated by those who have taken education at the level of junior high school, senior high school, and also elementary school education. Most of the livestock farmers in Kediri Regency run their business as a side business. The main occupations of the livestock farmers as shown in table 1 are labourers 31%, farmers 40%, entrepreneurs 10%, traders 13%, civil servants/police/army 5%, and livestock farmers only covers 2%.

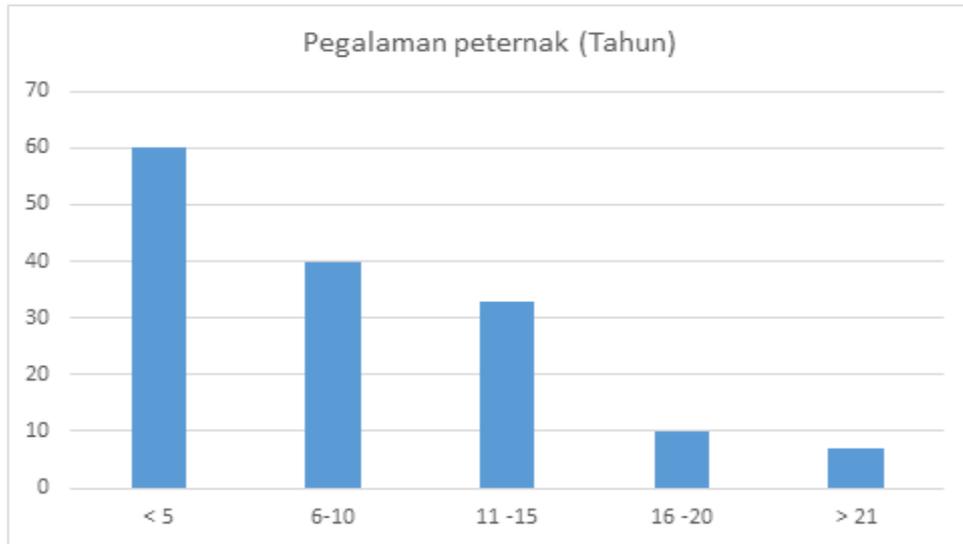
Chart 4. The Average of Livestock Ownership (Beef Cattle)



After reviewing the aspect of ownership/control of livestock in Kediri Regency, livestock farmers own the cattle independently and some others share the results (revenue sharing can be in the form of livestock and/or cash from the sales minus the initial capital, and the rest is divided into two). The level of livestock ownership/control of the community in Kediri Regency used the standard calculation of the Livestock Unit (ST) as shown in Chart 4 which explains that from the total number of livestock farmers, 61% controls 1 ST, 31% controls 2 ST, 3% controls 3-4 ST, and 1% controls 5 or more ST. This means that the smaller the business that is run, will produce a smaller income. The results of the research of Andri (2018)

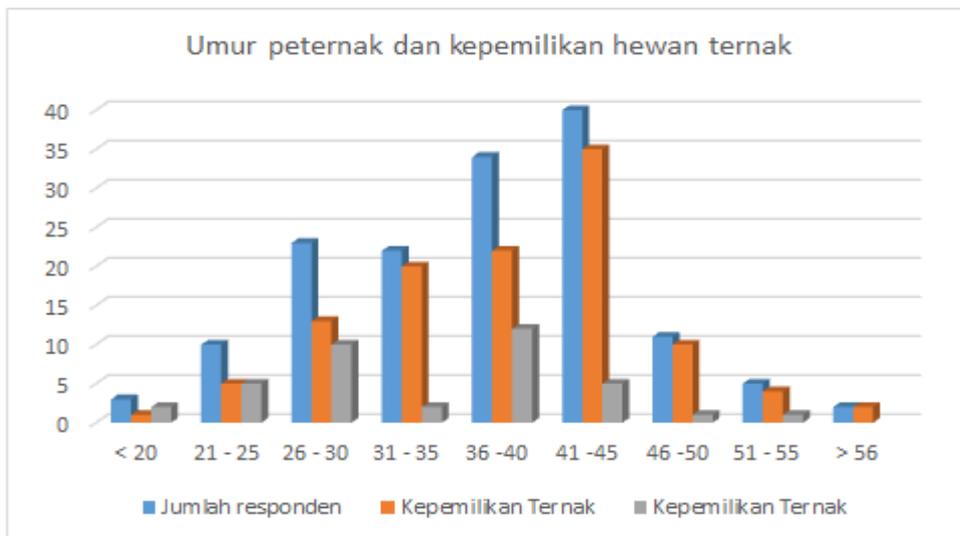
mentioned that one of the factors affecting the income of farmers is the number of livestock owned.

Chart 5. The Experience of Livestock Farmers



Based on Chart 6, it can be seen that based on the age of the livestock farmers, in general, they have a tendency to have their own livestock and also raise and take care of other people's livestock. From the results of the interviews, they did it in order to increase their income by raising other people's livestock and utilizing the rest of the agricultural crops as animal feed. In the rural tradition, livestock are considered as savings that will be sold when they have urgent needs such as paying for school tuition, a celebration, medical treatment, buying land/fields and others.

Chart 6. The Age of Livestock Farmers and Livestock Ownership



The average income of the people who live in the village is low, meaning that it is only enough to fulfill their daily needs. Even if there is a residue, the large portion of it will be used to pay the cost of social or traditional activities such as attending a wedding, holding a celebration, and other social events. Sometimes, it is found that the cost of those social or traditional events exceed the budget owned. Therefore, it is common to borrow money from their neighbours or from people who entrust the livestock to be sold. When the livestock are sold, the profits are deducted from borrowed debt.

In stimulating the development of beef cattle farming sector, the government of Kediri Regency can make various efforts. According to Achmad (2014), one of the steps is by integrating the development of beef cattle with the agricultural sector (rice, corn, etc.) as well as improving technology and innovation in livestock farming business. In improving the farmers' economy, a supportive policy is needed. It is in line with the opinion of Paskarina (2007) which explains that economic policies that spur the livestock farming sector could be a provider of jobs so that it can reduce poverty, facilitate economic growth in small communities to increase the standard of living and facilitate the use of natural resources for economic improvement (Bhattacharyya, 2018).

As the implementation of Kediri Regency government's program, in the context of accelerating economic recovery through "Empowerment and Improvement of Community Economic Systems", the development of livestock farming and fisheries is more focused on 4 (four) mutually supporting programs, namely: (1) Food Security Program with the aim of increasing the availability of food commodities from livestock and fish in sufficient quantities and adequate quality and to increase superior productivity of livestock farming and fisheries. (2) Agribusiness development program with the aim of improving the market mechanisms and creating a conducive climate for the growth of livestock farming and fisheries businesses in accordance with the potential of Natural Resources so that in the end it will produce competitive products in the market. (3) Livestock farmers' welfare improvement program with the aim of developing the capability of livestock farming business and building a strong institutional system. (4) Resource development program, facilities and infrastructure development program is intended to improve the capability of human resources namely livestock farming and fisheries officers as the effort to improve the quality of service to the community and to improve livestock farming and fisheries facilities and infrastructure to support the development of livestock farming and fisheries businesses in Kediri Regency.

Conclusion

From the results of the research, it can be concluded that the livestock farmers in Kediri Regency have a strong desire to improve their socio-economic condition in the future. A strategy that can be applied is in the form of strengthening through training in beef cattle development with contemporary management so that livestock farming is no longer considered



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as a side business. And the optimization of the role of stakeholders as partners in the development of beef cattle business in Kediri Regency is needed.

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