
STRUCTURE AND ROLE OF ACTORS IN SOCIAL NETWORKS MOA BUFFALO FARMER IN KLIS VILLAGE MALUKU REGENCY SOUTHWEST MALUKU PROVINCE

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ABSTRACT

Buffalo farmers in Klis Village in their development need to prioritize social values as the strength of the relationship between their members in interacting. Interaction shows the existence of a relatively stable relationship and shows the existence of a learning process that leads to strengthening the capacity of individuals or groups. The level of interaction can be described through the structure of the relationship between farmers (actors) in the social network and the role of each actor, to receive and share information so that it can show the pattern of relationships and the importance of actors in a network. This study aims to examine the structure of social networks and the role of actors in the social network of moa buffalo farmers in Klis Village, Moa District, Southwest Maluku Regency. The results showed that the social network structure of farmers at each click was in the form of an Interlocking Personal Network. Networks that have interlocking properties are networks that have a high degree of integration within the group but have low openness outside the group. Actors 11, 8, 27 and 23 are actors who have an important role in the social network of buffalo farmers, namely as; opinion leaders, gate keepers, bridges, and liaisons.

Keyword: Actor, Social Network and Moa Buffalo Breeders

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INTRODUCTION

The livestock sub-sector which is part of the agricultural sector has a major contribution to national development. This can be seen from the Gross Domestic Product (GDP) which has increased every year, namely; 1.57% in 2017, increasing to 3.7% in 2018 and in 2019 by 7.78% (Nolan et al., 2019). This means, the livestock sub-sector is also a driving force in increasing the nation's economic growth together with other sectors. However, although the agricultural sector has a large contribution to national GDP, the facts show that there has been a decline in the main agricultural actors, especially in the livestock sub-sector.

The condition of the main breeders in recent years has experienced a slowdown in terms of regeneration. The number of breeders in the last 10 (ten) years, has experienced a fluctuating decline. This can be seen from the trend of data on the number of breeders in 2011 to 2018 which has decreased (Kamp et al., 2021). Based on data from the Secretariat of the Directorate (Hasan et al., n.d.), it shows the development of the livestock sub-sector workforce, the most with elementary school education, which is as much as 33.7 percent and the business is still traditional and lacks the opportunity to receive education and various trainings to support its performance.

The low interest in the labor of breeders has an impact on the number of productive breeders in the future, so it needs serious attention, both on a national and local scale. In addition, there has been a shift in labor from the livestock sub-sector to non-agriculture ("Labor Productivity and Employment Gaps in Sub-Saharan Africa," 2017). The results of Amam and Soetrisno's research (2020) show that 18.9% of breeders switch professions to non-breeder workers, one of the reasons is a lack of information. In addition, the results of research by Suresti, Wati and Indrayani (2013) show that 62.9% of beef cattle farmers in Pesisir Selatan Regency, West Sumatra Province are old age breeders, many of whom have not completed formal education and have low technical knowledge, although the average on average have more than 10 years of breeding experience. Based on the results of the analysis of the 2003–2013 Agricultural Census data in (Pratiwi, 2020), it is shown that the breeder workforce is dominated by older workers who are more than 40 years old, the number of young workers is not large and tends to decline compared to 10 years. previously. One of the factors that led to a decrease in the number of farmers in addition to other factors is the lack of available information

Moa District, Southwest Maluku Regency has an area of 959.68 Km², which consists of 7 (seven) villages namely Wakarleli, Kaiwatu, Patti, Werwaru, Klis, Tounwawan, Moain, and Tiakur Village (BPS, 2018). In addition to cultivating agricultural crops, they also carry out animal husbandry activities in the form of the Moa Buffalo cattle business, which is endemic to the region. Klis Village is one of the villages that carry out Moa buffalo livestock activities. Based on the facts in the field, it shows that the way of farming Moa buffalo is still done traditionally by the local community (Tatipikalawan et al., 2019). Some of the results of previous research conducted in Moa District showed that there was still limited information, the low interest of the easy generation to carry out Moa buffalo activities and most of the breeders were old age breeders with the education level of most of them graduating from elementary school. For young people, the Moa buffalo business is less promising so that most of the breeders from among easily immigrated to the city to go to school and seek a better livelihood (Davies & Brown, 2008). Based on the problems above, the focus of the study in this research is more directed at the motivation of youth in carrying out Moa buffalo livestock activities in Southwest Maluku Regency.

The availability of information according to the needs of farmers can increase their knowledge and skills in carrying out livestock activities. On the other hand, the lack of information can weaken the process of farmer adoption in implementing a new innovation. Information can be used as a reliable source of strength in encouraging high productivity. The more farmers obtain reliable information, the better their knowledge, so that they can be used as a reference source of information for other breeders in their community. The purpose of this study is to determine the network structure and the role of actors (breeders) in receiving and sharing information with other actors (breeders), which can be analyzed using a social network approach, to determine the distribution of information channels that spread to all farmers.

METHOD

Research Paradigm

The paradigm used in this study is the positivism paradigm. The basic consideration is using positivism, because this paradigm is rooted in ontological understanding which discusses the truth of a fact. To obtain the truth, an approach method is needed to prove the truth of these facts. The approach method is a process of collecting data for research, in order to prove the truth of the facts.

Research Location and Time

The research was conducted in Klis Village, Moa District, Southwest Maluku Regency on Moa Buffalo breeders with the consideration that the area is a potential area for carrying out Moa Buffalo livestock activities. This research was conducted from January to February 2022.

Respondent Determination Method

One of the important stages in a social network is the determination of the population and research sample. The sample in network research has different characteristics from other quantitative research methods, such as; survey, content analysis or experiment. This is because in network research, what is studied is not only actors, but also networks, the relationships between one actor and another. Thus, the characteristics of sampling will also be different from these other quantitative methods (Bakti et al., 2021).

In network analysis, sampling always starts from the population. Therefore, the determination of the population must be precise, because the population is the basis for sampling. Borgatti and Halgin, in (Bakti et al., 2021) say, "in network research, there is no natural or natural boundary as in other quantitative research. In network research, what is being studied is not the respondent, but a network where network members may not be members of the population.

Laumann (1983), in (Bakti et al., 2021) said, "to be able to make determinations on the population, there are two main approaches in making specific boundaries in the network, namely; realist and nominalist approaches". The realist approach is one of the approaches used to limit the population in the network, by looking at the social network from the perspective of the informant, where researchers should not use subjective assumptions in determining the network of actors. The researcher, on the other hand, lets the actor define and define the network, so that the researcher only needs to describe the network formed by the actor.

The nominalist approach is one of the approaches used to limit the population in the network, by looking at the network definition based on the conceptual framework of the researcher, where the researcher can define the network and its boundaries according to the objectives and the research framework used or the theory used.

Based on the explanation above, this research is limited by using a nominalist approach, where the analysis of social networks in this study is focused on interpersonal relationships among farmers in their social networks (Borgatti et al., 2018).

Data Source

The data collected is divided into primary data and secondary data. Primary data was obtained through a social network questionnaire that focused on data on relations between actors, and secondary data was obtained from relevant agencies related to the interests of this research.

Data Collection Technique

According to (Sugiyono, 2014), "there are two main things that affect the quality of research data, namely the quality of research instruments, and the quality of data collection". In research, besides requiring the right method, it is also necessary to choose relevant techniques and data collection so that the results of the research are objective. (Nuzul, 2019) states, "The use of appropriate data collection techniques and tools enables objective data to be obtained". According to (Bungin, 2011), "The data collection method is part of the data collection instrument that determines

the success or failure of a study." Therefore, the data collection technique used must be in accordance with the nature and characteristics of the research conducted or based on the approach method used.

The data collection technique in this study uses relational data that is focused on questions about actors (breeders) so that they can describe the pattern of their social network structure. Therefore, questions in social networks are divided into three parts (Bakti et al., 2021), namely; first, the name of the generator. Name generator is a question related to identifying the names of the actor (breeder) relations. The purpose of this question is to compile a list of network names of actors, where the informant or respondent is asked to mention the names of friends or network members. From this question, the names of the actors and their networks will be obtained.

Second, the name of the interpreter. The name of the interpreter is a question that relates to the form, type, and nature of the relationship between actors and networks. That is, when the researcher has gotten the name of the network member (name of the generator), the informant is then asked about the shape, type and intensity of the relationship between the actors. The purpose of these questions is to obtain information data about the form and intensity of relationships from actors in the network.

Third, the name of interrelelers. The name interrelelers are questions related to the relationship of each actor and network. The name that has been obtained (name of the generator), as well as the form, type and intensity of the relationship (name of the interpreter), is then explored by further asking how the relationship or relationship for each actor is.

Data Analysis Techniques

The data analysis technique used UCINET version VI software. UCINET version VI is a software developed from UCINET IV and UCINET V, which was developed by (GUIDE, 1999) which is specifically designed for social network analysis. UCINET VI was chosen because it is easy to use and produces optimum estimates after three calculations (Bakti et al., 2021). The steps in analyzing social network data can be done by:

- a) Creating edgelist data formats. Edgelist data is a data format used to register the names of actors and their relationships with other actors vertically.
- b) Based on the edgelist data format, then a sociogram that describes the structure of the social network of farmers is carried out.
- c) After the social network structure is formed, then determine the role of each actor in the social network structure.

RESULTS AND DISCUSSION

Buffalo Breeders Social Network in Klis Village, Moa District

In addition to generating a social network structure, it can also be used to identify the roles of actors in the network. The role of actors in the network structure can be described in several types of roles, namely; opinion leaders, gate keepers, bridges, liaisons, and isolates. Figure 1 illustrates the network structure of farmers in Klis Village, Moa District, Southwest Maluku Regency.

Social Network Structure

A social network is a social structure formed from nodes (which are generally individuals or organizations) tied by one or more specific types of relationships such as values, visions, ideas, friends, descendants, and so on. The social network structure can determine the level of cohesion of each

farmer in interacting. Figure 1 describes the social network structure of farmers in Klis Village, Moa District, Southwest Maluku Regency.

Based on Figure 1, it shows that the Kliks formed are based on farmer groups, namely:

1. Click I consists of 9 breeders, namely: 1,3,5,7,9,10,11,12,13,.
2. Click II consists of 7 breeders, namely: 8,14,18,19,22,24
3. Click III has 6 breeders, namely: 2,6,16,25,27,30.
4. Click IV totals 8 breeders, namely: 4,17,20,21,23,26,28,29

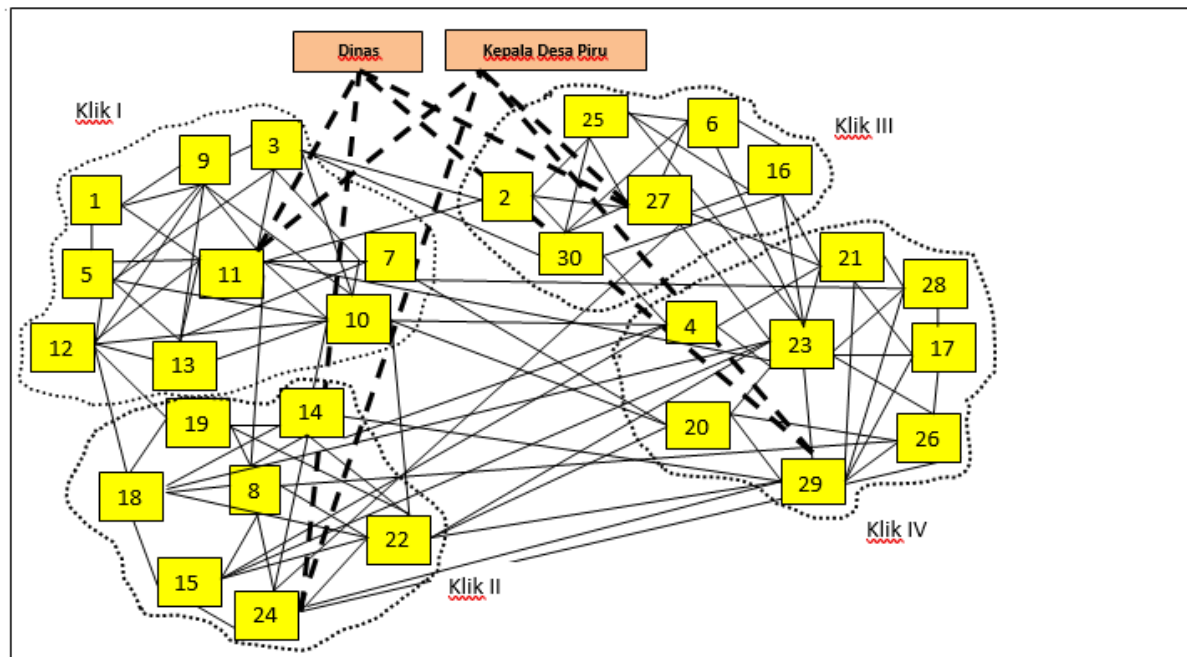


Figure 1. The structure of the social network of farmers in Klis Village, Moa District, Southwest Maluku Regency

Sorce : Primery Data, 2022

The network structure formed in each klik indicates an open network between farmers, but the openness is mostly in the klik group. According to Roger and Kinkaid (1981) in (Trisnani, 2016), this network structure is a network structure that is personally interlocking (Interlocking Personal Network). Networks that have interlocking properties are networks that have a high degree of integration within the group, but have low openness outside the group. This means that not all actors (breeders) can have access outside the group to obtain information, but only through certain actors, then the information is distributed within the group. According to P. Robins (1984) in (Puttileihalat, 2019) states that the structure of social networks in the form of radials or fingers has the characteristics of a centralized relationship. This means that the relationship that occurs between actors in the network has a very high level of integration in the group, where each member has a high level of interaction in the group. Groups with a high level of relationship interaction have an open relationship nature and have a high level of dependence on actors who are considered to have a large or important role in the network group.

The results showed that farmers in each klik had a high level of interaction in their respective groups. This condition can occur because the actors in each group are actors who play an important

role in fishermen's social networks such as actors 8, 11, 23 and 27. The actor is the person who is entrusted as the group coordinator and has the responsibility for the implementation of buffalo farming activities. In addition, actors play an important role in distributing information from outside the group and sharing it with other farmers within the group, for example; information related to breeding buffalo, providing nutrition and other information, both information from the government (Technical Service) and from the Klis Village Head. This condition shows that all breeders within the group as well as actors outside the group have a line of coordination with these actors.

Actor Role

Besides being able to identify and describe the relationship between people or individuals through the structure of a social network, it can also identify the role of each actor in the network, such as; opinion leader, gate keepers, bridge, cosmopolite, liason and isolate. However, in this study, not all actors have all of the above types of roles. This is because the identification of the role of the actor is adjusted to the function of the existence of the actor in the network. In Click I, II, III and IV, actors who have important roles in the social network structure are actors 11, 8, 27 and 23. Actor 11 has relationships with 9 farmers in the group and 4 outside the group. In Click II, actor 8 has a relationship with 6 farmers in the group and 6 people outside the group. In Click III, actor 27 has relationships with 5 farmers in the group and 4 people outside the group. It should be explained that each actor who has an important role in the clique network also has a relationship with the government (Related Office) and the Klis Village Head.

Based on the explanation above, it can be concluded that actors who have roles as opinion leaders, gate keepers, bridges, and liaisons are actors 11, 8, 27 and 23. These actors act as bridges because they act as liaisons or bridges between other actors within the group and outside the group. Various livestock activities and information from outside are always coordinated with these actors because of their role as opinion leaders and liaisons (group coordinators). In addition, these actors also have a role as gate keepers, where any information that comes is always through a group meeting and is led directly by the chief coordinator.

CONCLUSION

Based on the explanation above, it is concluded:

- a. The social network structure of buffalo farmers in Klis Village is an Interlocking Personal Network. Networks that have interlocking properties are networks that have a high degree of integration within the group but have low openness outside the group.
- b. Actors 11, 8, 27 and 23. are actors who have roles in the social network of farmers in Klis Village, namely as; opinion leaders, gate keepers, bridges, and liaisons.

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