



Social Capital and Communication Systems of Ettawa Goat Breeders in Purworejo Regency

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Abstract

The purpose of this study is to determine the social capital and communication system of Ettawa goat breeders (Peranakan Ettawa/PE) Kaligesing race in Purworejo. The study used the theory of social capital and communication systems in the perspective of Niklas Luhmann. The method of this study employed ethnography. Social capital of breeders is developed within farmers' groups (Poktan). The existing social capitals in Poktan include trust, network, and norms. Social capital of trust is seen in the management of membership dues/contribution, poktan board transparency, division of work, and goat farming with nggaduh system. Network appears in the cooperation between Poktan with other Poktan, instructors/educator, traders/markets, universities, villages and districts. Norms are seen in the agreement on the division of dues, waragan group, and the breeders who use goats as debt guarantee and youth Poktan rules that prohibit breeders to sell the goats before lambing.

Keywords: social capital; communication system of breeders; trust; networks; norms

INTRODUCTION

Ettawa-breed goat (*Peranakan Ettawa/PE*) has been farmed by Purworejo breeders for many years. The history of *Poktan* and goat farming that has been going for years in Purworejo indicates the presence of social capital within the breeders. The breeders work together, organize themselves, develop the management, and build decades of cooperation to achieve common goals. Such *Poktan* aspects show that social capital has long grown and evolved over the goat farming history in Purworejo.

The breeders learn and share information through goat farming *Poktan*. Breeders always learn from experience and develop new techniques of farming. The knowledge of breeders often exceeds the knowledge of instructors. Some *Poktan* even significantly grow and thrive in this goat farming. Social

capital is sometimes neglected by local governments, so that they are less empowered.

Minister of Agriculture has issued Decree No. 2591 / KPTS / PD.400 / 7/2010 on the Determination of Kaligesing Goat Breed. It means that all goats that exist in Indonesia, which has a physical resemblance of Kaligesing goats, are descendants of goats Kaligesing. Population of PE goats or Kaligesing goat in Purworejo has reached 75,666 goats, where 72% of which are in Kaligesing District (Remark from the Mayor of Purworejo, 2015). The purpose of this study is to determine the social capital and communication systems of goat breeders in the Kaligesing district, Purworejo Regency.

Research on social capital has been done before, for example the research from Eko Handoyo and Suandi. The study of Handoyo shows the importance of social ca-

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pital for vendors to survive in difficult times such as relocation. Social capitals, especially trust, and network contribute to improve the welfare of merchants (Community Journal, Vol 5, No 2, 2013). Suandi study also shows that social capital (local associations and community character), either directly or indirectly contributes positive effect on the economic well-being of the family (Community Journal, Vol 6, No 1, 2014).

The theories used in this study are the social capital and communication systems. Social capital according to Putnam is positive because it connects us (Scott, 2011: 240-243). Social capital is the friendships, networks, and closer relations that create networks; they often shape the quality of life (Field, 2008 in Plummer, 2011: 285).

Social capital is the capital obtained through relations / social relations (Lin, 2006: 19). Putnam (1993) defines social capital as a form of social organization, such as trust, norms, and networks that can improve the efficiency of society by facilitating some coordinated actions (McLean, 2002: 80).

The thoughts on the system in the communication come from the General System Theory (GST) (West and Turner, 2009: 61-63). One of the theories that influence the GST is cybernetics and information theory (von Bertalanffy, 1975: 90-91). Cybernetics is the study of the process of information, feedback, and control in communication systems. Information is to reduce uncertainty, unexpected message and excessive information (Griffin, 2009: 43-44).

Theory is a holistic system; it stresses the interrelation between the parts of a whole. The system consists of a set of components that relate to one another and are interdependent holistically. A system is a group of parts that works together in a certain order to accomplish a number of goals (Churchman, 1968 in Rogers, 1994: 407).

Systems theory used in this research is the system theory in Luhmann's perspective. There is an important issue in Luhmann system theory which is the relationship between the system and the environment. The environment is simply the "something

else", something that is outside. The system should be distinguished with the environment, because the environment is composed of many complex systems. Then the environment is always more complex than the system itself (Luhmann, 1995: 181-182). Communication system which is referred in this study is the process of production and reproduction of information performed by goats *Poktan* Kaligesing District, Purworejo.

RESEARCH METHODS

The method used in this study was ethnography. Ethnography aims to understand the other point of view of society that is focused on habits and everyday behavior (Bloor, 2006: 69). Understanding the parts of the world is more or less the same as experienced and understood in the daily lives of people who live "outside" life of researchers (Crang and Cook, 2007: 1). Ethnography is the study of the culture of a group, usually as a culture that expresses the meaning of something through a series of activities that is run continuously (Preissle and Grant, 2004: 164).

Data collection techniques used Focus Group Discussion (FGD) and observation. FGD offered an economical alternative data access for ethnography to obtain data on the meaning of the group and, more importantly, the norms of the group (Bloor, Frankland, Thomas and Robson, 2002: 17). Researchers conducted focus group and observation by informants in depth about social capital and communication systems.

The study population was in Purworejo and the samples taken were the District of Kaligesing. This district was chosen because it was the center of goat farming in Purworejo. Even the history of goat farming in the region dated back to the Dutch colonial government. Sampling technique employed was purposive sampling, and the determination of the informant was by simple random technique. Informants in this study were the chairman *Poktan*, chairman of youth *Poktan*, village head (Kades), instructors of the District Education Centre (BPK), and chairman of *Poktan* Breeders Association members.

RESULTS AND DISCUSSIONS

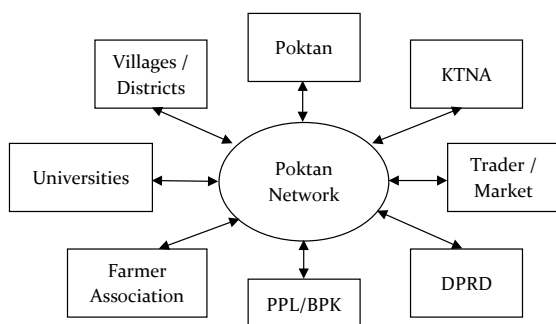
Social Capital of PE Goat Breeders

There are three aspects of social capitals of PE goat breeders in Kaligesing, namely the network, trust, and norms. These three aspects are interrelated and form a social capital of farmers in goat farming. The social capital of farmer is growing and developing in *Poktan*. *Poktan* is formed along with the cooperation fostered in the farming of goat breeders for many years. Social capital can be found in the activities of breeders when it is in *Poktan*.

Network

Network that has been built by *Poktan* is cooperation with the other *Poktan*, Kontak Tani Nelayan Andalas (KTNA), PE goats traders, legislators of Purworejo (such as when there is contests goat), Officers Field Instructors (PPL) from the District Instructors Board (BPK), PE Goat Breeders Association of Purworejo, universities, villages, and districts. Social capital networks can be seen in the following chart:

Chart 1. Social Capital Network



The network formed between breeders occurs when they start farming the goat individually. The similarity of this work encourages farmers to form groups/*Poktan*. *Poktan* in Kaligesing started since 1984, when it was chaired by T. Wartono and continued by Tukiran until Sutono now. This *Poktan* originally only consisted of a few farmers, but gradually it became developing. Young people group even separate from Anajni *Poktan* and form their own *Poktan* (Satwa Manunggal).

The *Poktan* also initiates cooperation with field instructors (PPL) which is under BPK. PPL routinely provides counseling to farmers. Breeders who need certain information about the farming of goats sometimes is delivered by PPL. PPL provides counseling to *Poktan*. Although, there is limited number of PPL to serve the districts, periodic counseling process is still implemented. In addition to having cooperation with PPL, *Poktan* also has agreements with KTNA.

The *Poktan* board actively invites people who have not been farming goats to participate. Chairman of Anjani *Poktan* provides an explanation of the gains when they farm the goats. Among other advantages are to give additional income, to help the children's school fees, and it does not require much time to care for goats. The time that it takes only 2 hours / day for lawn mowing and maintenance is also easy.

Some people who start farming goats are attracted to the PE. There are farmers who began farming by breeding other people's goats (*nggaduh* system) and there are people who buy the goats themselves. This new breeder then becomes a member of Anjani *Poktan*. Networking among farmers becomes greater as the number of members increasing. The success helps triggering *Poktan* members of society who are not yet members to join the *Poktan*. The success of *Poktan* members also motivates other members to succeed.

Similarly to youth *Poktan*, the chairman approaches young people who like to chat or *cangkruk*. The chairman explains the advantages of young *Poktan* in farming goats. Besides getting profit, they can maximize their spare time and also avoid unproductive activities. Some youths are interested in and start breeding PE goats. The young people who start breeding goats then become the members of *Poktan*. Youth *Poktan* consists of 21 people and has their own assets of goats.

Anjani *Poktan* always insists each member to always think to develop themselves and face their problems by heart. This principle has led this *Poktan* to advance and develop their progress. The *Poktan* has ass-

ets of approximately Rp. 3.000.000, - - Rp. 3.500,000, - excluding the goats, and savings-loans. Anjani *Poktan* also has a cooperation incorporated under the law to improve the social security of its members.

Poktan also plays a role in reducing the misuse of aid, especially the aid of PE goat to the public. When government provides goats as aid, people usually sell them directly. But with *Poktan*, the members cannot just sell the goat because there are rules (AD / ART) to be mutually agreed. Therefore, the aid of goats from government could be better managed using *Poktan*.

This network also occurs among *Poktan*, mainly formed in the exchange of information on PE goat farming techniques class A / super and procurement contests. PE goat farming has dual purposes, namely the production of milk and meat. But besides these two goals, the goats are also used for the contest. The information on the contest-class goat technique is different from the usual goat farming. Some technical terms of PE goat farming class A are not even commonly found in Regular PE goat farming class. PE goat breeders for the contest usually are farmers with large capital/entrepreneur.

The farming techniques that breeders obtain are not from the government but the communication process of an independent learning. Breeders look for the goat farming information through a variety of sources and media. Then, they try a variety of farming techniques. Therefore, they have long experience and knowledge in farming that they own until now.

This knowledge is distributed through a network between farmers and *Poktan*. This information flows from one farmer to another farmer, from one *Poktan* to another. The practice of PE goat farming class A is generally very similar between breeders because of the same resources among farmers themselves.

Network of breeders is also formed through contests which are often held alternately. Breeders are working together to hold a goats contest. This cooperation includes the formation of the committee, fundraising, implementation and evalu-

ation contest. Contests are often used by breeders to exchange the latest information about PE goat farming techniques class A.

The contest is a network used for marketing or promotional event for goat breeder to regional and national markets. Breeders desperately need the contest as the competition arena and market the product. Buyers from various regions usually come in the contest. Supply and demand meet in the contest goats. Contest goats usually divide into classes A, B, C and D.

Breeders find it difficult when they hold goat contests, particularly with regard to funding. They think it is difficult to access the budget of the Office or Local Government. They sometimes apply for personal assistance to members of the Parliament House who concern with the cultivation of goats. They hope that the local government can be more concerned with the difficulties of farmers in the holding the contest.

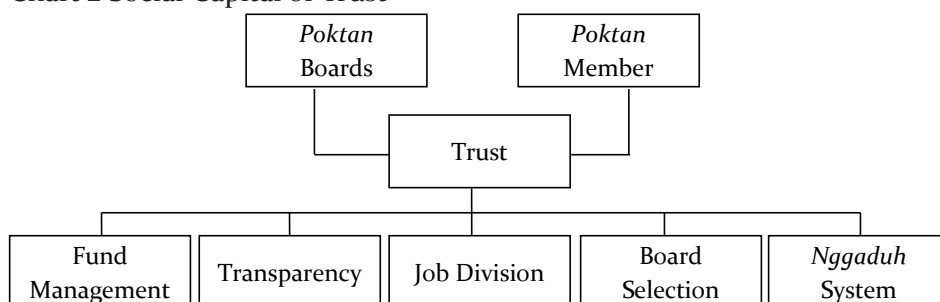
Trust

Trust is the social capital aspect that breeders have beside network. The trust includes the management of membership contribution, transparent board of *Poktan* on the financial condition collected from members, division of labor of *Poktan* (breeding and reforestation), process of selecting new boards of *Poktan* and PE goat farming using *nggaduh* system. Social capital of trust can be seen in the following chart 2.

This trust is seen in financial contribution management that breeders should transfer to the *Poktan* Boards. *Poktan* breeders, as members, regularly pay dues, sometimes every week or month according to the agreement. The fund is managed by the board of PE goats farming.

According to the chairman of Anjani *Poktan*, the management must be based on transparency and openness. Administrators must be open to deal with the various problems encountered by *Poktan*. One important issue is the financial problem. *Poktan* boards always report financial income and expenses to *Poktan* members. This report is usually done during the regular meeting of *Poktan*. Transparency is important so each

Chart 2 Social Capital of Trust



member of *Poktan* knows their financial situation. All members must know how much amount of contributions collected and used for the running of *Poktan*.

The finance of Anjani *Poktan* is not held by chairman but managed by treasurer and secretary. This form of budget transparency is important so that the members are not suspicious of the chairman or the boards. When finances are managed by chairman, it will give the impression to the member that fund is not managed in a transparent manner. This financial management fosters the trust of the members to the chairman and *Poktan*. This aspect is important to create an atmosphere of mutual trust within the group to grow together.

This social capital is also visible when the chairman of *Poktan* motivates his members to ask the purpose of the group establishment. Will *Poktan* only be silent and monotonous as it is now or like what? This question is often raised by *Poktan* chairman to sensitize his members about the original purpose of the group. *Poktan* will certainly face many obstacles in PE goat farming. Therefore, togetherness is necessary in the group. This togetherness will encourage *Poktan* to continue to grow.

One of *Poktan* activities to cultivate goats is to form a division, namely division of farms and reforestation. This division tasks include taking care of the number of breeding goats owned by *Poktan* and livestock raising and selling. The main task of reforestation division is to carry out *sapta usaha* (ten steps) of goat farming and provision of green plants for its members. Main green plants are *calliandra* and grass. Both of these plants grow in the home yard of

Poktan members.

Another form of trust is at the election of the chairman and *Poktan* board. *Poktan* members will select a chairman who, according to them, is the most trusted. The trust is necessarily formed in the long interaction process as long as they are in *Poktan* membership. *Poktan* chairman and board members will also run the trust in accordance with the working procedures and governance.

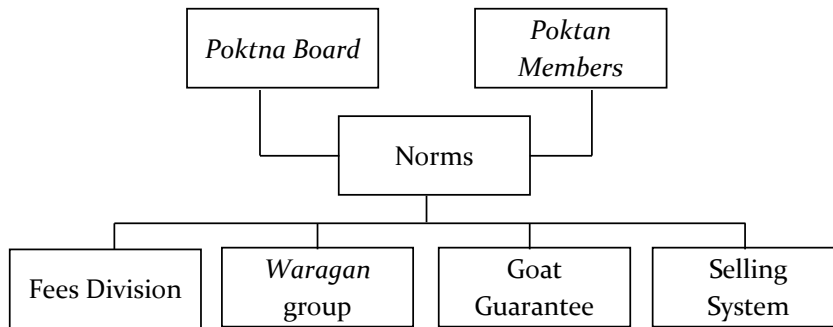
Trust also appears in *nggaduh* system of goat farming. This system occurs when the capital owners and breeders work together. The capital owners entrust their goats to the breeders. The result could be 60% for capital owners and 40% for farmers or 50% of capital owners and 50% for breeders. These results can also be achieved by dividing the number of children produced by breeding goats.

Norms

The next aspect of social capital is] norm. This aspect is seen in the management of *Poktan*. This norm is found in the following activities: first, the governance division of membership fees, both voluntary and mandatory fees. Second, the rules agreed by the *waragan* group. Third, PE goat is used to guarantee the debt of breeders. Fourth, the rules in youth *Poktan* that goats are farmed by members may not be sold before lambing. Norms of social capital can be seen in the following chart3.

The regulation on compulsory and voluntary fees/contributions is a form of norms that have been agreed by each member of *Poktan*. Youth *Poktan* defines two types of contributions namely mandatory and

Chart 3. Social Capital Norms



voluntary contributions. Voluntary contributions can be taken at any time by the members while mandatory contributions can only be taken when the day of *Eid*.

Anjani Poktan has plowing group (*waragan*), which means that 10 people take turns to plow the land of other 10 members. This is done in turns so that all of the land / plantation owned by a member can be plowed. Each member will have their own schedule. For members who are not present in this *waragan* have to pay the fine Rp 1,000, - or Rp. 2.000, -.

The shape of norm that develops among farmers is about of debts. According to head of village, farmers who want to owe to others often use their goats as guarantee. The breeders who want to owe the money just meet the people who want to be owed and give the goat. If farmers cannot repay the debt, the goat will be owned by the person who gives the debt. It is commonly practiced among breeders.

The norm which is used in Youth Poktan "Satwa Manunggal" is that the cultivated PE goat may not be sold before lambing. Each member of Poktan who wants to raise goats for fattening, should only be sold after the goat's lambing. The norm is intended that the number of goats owned by Youth Poktan is not reduced. When breeders can freely sell the goat, it is possible that the number of goats owned by Youth Poktan will be exhausted. But if breeders may only be sold after lambing, then the number is maintained.

Youth Poktan also has norms for the savings of its members. There are two types of savings and loan namely voluntary and

Holy Day. Voluntary savings can be taken by members at any time, while Holy Day saving should only be taken when *Eid* comes. Poktan motivate its members to have Holy Day deposit to buy goats.

Communication System of PE Goat Breeders

The system is always not more complex than the environment. The system is a form of reduction of environmental complexity. The system should not be more complex than the environment, because if the system is more complex than the environment then the system will be destroyed. A more complex system of environment is a system that is not managed to simplify the "noise" of environment. It will be equally "noisy" with the environment. Whereas, the basic functions of the system is to reduce "noise" of environment.

The communication system among breeders was formed with the establishment of Poktan. Poktan is formed to reduce the complexity of the environment. Communication system within Poktan is not more complex than the environment of PE goat farming. Poktan limits themselves in the cultivation of goats, especially the production of female goat stocks, seedlings, processing of goat manure into fertilizer and the processing of goat milk. The whole issue is handled by Poktan this will lead to the economic aspects, namely the sale and purchase of goats.

Poktan is a system that distinguishes itself with its surroundings. There are many problems that develop in an environment of farmers. Poktan tries to simplify the comp-

lexity of the environment and limit themselves only in the cultivation of goats. Poktan is not willing to deal with the whole issue of breeders. It distinguishes itself with the environment, focusing on the cultivation of goats. Poktan is not intended to solve the whole problem of breeders.

Breeders communication system is formed in the process of production and reproduction of information on PE goat farming. Production and reproduction process can be explained in the following chart 4.

Poktan as the reality of the communication system is a system that produces and reproduces information. Poktan produces goat farming information when officials give explanations about goat farming techniques. The actor is producing information for the technical maintenance of the goat, the manufacture of cages, goat manure into fertilizer processing, processing of goat milk, and other information related to goats farming.

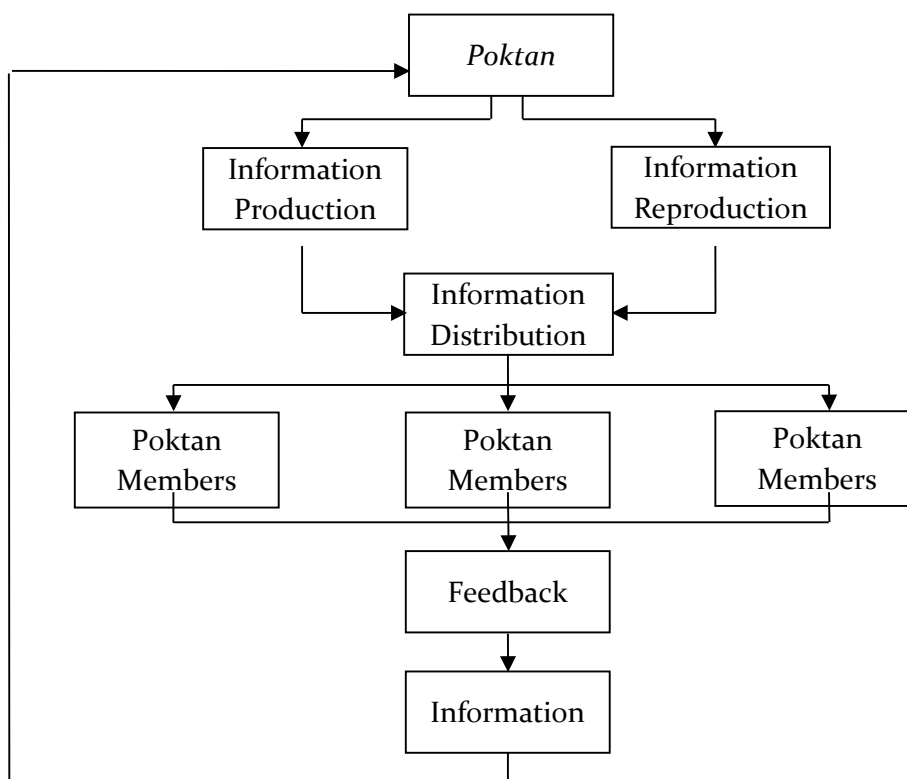
The information which is communicated by committee will get feedback

from Poktan members. This information from Poktan members will be accepted and reproduced into new information by the board of Poktan. This new information will be re-communicated to the farmer. Breeders will provide feedback on this information. The new information will be used to reproduce the following information. That is the process of production and reproduction of information in communication systems breeder.

This information will become the practice of goat farming if it is considered relevant by the breeders. The relevant information will drive breeders to improve the quality of goat farming. Breeders have not previously known the techniques of good cage. Now, breeders can make a better practice of goat farming. The information about PE goat farming has also made farmers to practice more advanced technique in terms of goat farming, such as in the case of using simple technology in feeding livestock.

Lamtoro is fodder which was originally considered toxic by the breeder. But

Chart 4. Breeders Communication Systems



the head of *poktan* conducts various experiments and eventually *lamtoro* is proven non-toxic for animal. This information is then distributed to the farmer and they start doing the practice that has been given. *Lamtoro* becomes fodder which is used breeder.

The system always pays attention and learns the complexity of the environment, one of which is the development of technology. The system will reduce complexity and take environmental information to be used as a basis for solving the problems faced by the system (*Autopoiesis*). For example, information about farming techniques class A goats, goat milk processing techniques and processing technologies on goats' manure as fertilizer.

The system will retrieve information from the environment when breeders encounter problems. There is abundant information in the environment and the system must select and choose what information will be taken. Selecting and choosing the information will always pose a risk. The information which is taken from the environment will be processed to resolve the problems. *Poktan* communication systems and environments run in terms of complexity reduction.

The communication system of farmers in other systems is associated with the aspect of how the information will be understood and accepted by the outside system (double contingency). For example, when *Poktan* deals with BPK, *Poktan* considers how the information which will be delivered can be acceptable. Likewise, *Poktan* interacts with other *Poktan* or other outside systems.

Poktan often interacts with BPK to discuss the issue of PE goat farming. BPK originally provides a lot of information for goat farming *Poktan*. BPK helps shaping the behavior, attitudes and skills of farmers in the early initiation of goat farming. BPK regularly conducts training and visits *Poktan*. BPK considers that *Poktan* is very important because it will facilitate the communication process. BPK will find it difficult to communicate with the breeder when there is no *Poktan*. It means that BPK will come

from one house to another to initiate goat farming. That way is conducted by BPK to introduce PE goat farming to society. When *Poktan* is growing and progressing, this relationship between BPK and *Poktan* remains well.

CONCLUSION

The developing social capitals within the breeder consist of trust, networks and norms. Trust is formed between breeders in the management of membership contribution. Each breeder is periodically depositing fees, and then this fee is managed by the board of *Poktan* (treasurer and secretary). Another form of trust is on the board of the group's financial transparency. Administrators in each group meeting always report financial condition which is collected from members.

Trust is also seen in the selection of *Poktan* board. The chairman and board who are elected will have the trust and support of members. Social capital of trust is also presented in PE goat farming systems of *nggaduh* Goat owners entrusts the goat to be maintained to a breeder. The goat farmer will farm and share profits according to the agreement that has been set.

Social capital of network is formed when *Poktan* initiates cooperation with BPK through PPL program. The network is also formed among farmers, particularly in terms of exchange of information in PE goat farming class A/super. This farming information is obtained by breeders from businesses practice for years and is distributed among farmers. PE goat contest is another form of social capital among farmers. PE goat contests usually involve the committee that not only comes from certain *Poktan*, but also from different *Poktan*.

The next social capital is the norm, one of which is in a way of distribution of membership contribution. Voluntary contributions can be withdrawn by its members at any time, but Holy Day contribution can only be withdrawn during *Eid* day. Plowing group (*waragan*) is the norm of the breeder, the groups that plow their farming land members alternately. Members who are not

present in *waragan* will receive penalties or fine.

Breeders have been accustomed to use goats as collateral when they owe to someone. They will give the goat when the debt. If they cannot pay off the debt, then the goat will become the property of the creditor. Youth *Poktan* have norms in terms of sales of goats, that members can only sell goat if they have child. The norm is intended that the assets belonging to goat *Poktan* is not exhausted.

Breeders communication system is characterized by the production of information. The information is then distributed to the farmers who are members of *Poktan*. Farmers who receive this information will provide feedback. The feedback in the form of information will be reproduced by *Poktan* to be new information. This information is distributed back to members of *Poktan*. Continuously, the process of the communication system is run that way for goat breeders.

REFERENCES

- Bloor, M., Jane F., Michelle T., and Kate R. 2002. *Focus Groups in Social Research*. California: SAGE Publications Ltd.
- Bloor, M. and Fiona W. 2006. *Keywords in Qualitative Methods: a Vocabulary of Research Concepts*. California: SAGE Publications Inc.
- Crang, M. and Ian C. 2007. *Doing Ethnographies*. California: SAGE Publications Ltd.
- Griffin, E.M. 2009. *A First Look at Communication Theory*. 7th edition. New York: McGraw-Hill.
- Handoyo, e. 2013. Kontribusi Modal Sosial dalam Meningkatkan Kesejahteraan Pedagang Kaki Lima Pascarelokasi. *Komunitas*(5)2.
- Lin, N. 2006. *Social Capital: a Theory of Social Structure and Action*. New York: Cambridge University Press.
- Luhmann, N. 1995. *Social Systems*. Translated by John Bednarz, Jr. with Dirk Baecker. Stanford: Stanford University Press.
- McLean, S.L., David A.S. and Manfred B.S. (eds). 2002. *Social Capital: Critical Perspectives on Community and "Bowling Alone"*. New York: New York University Press.
- Plummer, K. 2011. *Sociology: the Basics*. Terjemahan Nanang Martono dan Sisworo. Jakarta: PT. Rajagrafindo Persada.
- Preissle, J. and Linda G. 2004. *Fieldwork Traditions: Ethnography and Participant Observation in De Marrais, K. and Stephen D.L. (ed.)*. Foundations for Research: Methods of Inquiry in Education and the Social Sciences. p. 164. NJ: Lawrence Erlbaum Associates, Inc.
- Rogers, E.M. 1994. *A History of Communication Study: a Biographical Approach*. New York: The Free Press.
- Sambutan Bupati Purworejo pada Kontes/Lomba Kambing Ettawa di Sumber Alam Center (SAC), Kecamatan Butuh, Purworejo, Ahad: 17 Mei 2015. Bagian Humas Setda Kabupaten Purworejo.
- Scott, J. 2011. *Sociology: the Key Concepts*. Terjemahan Tim Penerjemah Labsos FISIP UNSOED. Jakarta: PT Raja Grafindo Persada.
- Suandi. 2014. Hubungan Modal Sosial dengan Kesejahteraan Ekonomi Keluarga di Daerah Perdesaan Jambi. *Komunitas*,6(1)
- Von, B.L. 1975. *General System Theory: Foundations, Development and Application*. Revised Edition. New York: George Braziller, Inc.
- West, R. and Lynn H.T. 2009. *Introducing Communication Theory: Analysis and Application*. 3rd Edition. Terjemahan Maria Natalia Damayanti Maer. Jakarta: Penerbit Salemba Humanika.