

A Suitable Communication Strategy for Boer Goat Breeding in Wonosari Sub-district of Malang Regency-Indonesia

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ABSTRACT

This paper studied communication approaches for disseminating a new innovation in Boer goat breeding. The target of this study covered small scale goat breeders in Wonosari sub-district of Malang Regency, East Java-Indonesia. The approaches were based on the characteristic of rural society, human and natural resources, typology of society, structure of society, and village organization. Result showed that the breeders at Wonosari just hear about Boer goat and they breed only two kinds of Boer goat, namely Ettawah and Sumbawa. In addition, they have limited knowledge due to lack of information about the recent development in the field of goat breeding. A suitable communication strategy was proposed prior to implement Boer goat farming which had been planned for the local society.

Key Words: communication, strategy, Boer goat.

INTRODUCTION

Boer goats were originated in South Africa. They were brought to western Uganda by Black Nations in first time known early as AD 1200. The indigenous' animals were developed on Southern Africa as stock to European imports. They were just attractive meat animals with their hardiness, adaptability, high birth rating and marketability. "Southern Bantu" people, the Namaqua Hottentots, The Indians of India and Europeans were among the various and potency breeders known earlier "Boer" in Dutch means "farm". However, this breed was becoming much more distinct as a definite meat type goat nearly identical with the characteristics of the nowadays Boer. Some of the earlier breeding stock of the Boer goat was developed by Mr. W. G. Jordaan of Buffelsfontein, Somerset East. The Boer goat was known as the only goat breed involved in a performance test for meat production since 1970. Since then in time they were imported into these countries such as Germany, New Zealand, and Australia. The Boer goats were also released into the USA and Canada, though they were within quarantine till April 1993. And now, the Boer goat has been imported by Australia, British, West Indians, Canada, Denmark, England, France, Germany, India, Indonesia, Malaysia, Mexico, Netherland, Antilles, New Zealand and virtually all states of United State since 1987 [1].

The Boer goat have recently been popularly used as well as ideal alternatives for barely empty space and land properties maintenance tools. Few eventual owners were recorded and showing their economical and environmental contributions in cost expenses and curbing down pollution health risk.

Local governments in Indonesia have made some efforts to alleviate poverty of small-scale breeders, among others, through universities and non-governmental organizations. Many civil society organizations strongly supported government efforts to overcome the problem of poverty. According to the Agriculture

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Department of Malang Regency [2], the development of livestock would be able to significantly increase household incomes and reducing poverty in the villages. But in reality, the modern development of goats did not provide benefits, because it required high cost high risk, and not produce quickly [3]. Only small breeders who did not lose because they did traditional breeding.

Materials and Methods

Location of this research was at Wonosari village. The village was one of 33 districts at Malang regency and the area number was 12,3 km² . It was included 4 village-districts. Wonosari village had potency and special production in the fields of agriculture, horticulture industry, and many tourist objects. Map of location was as Figure 1.

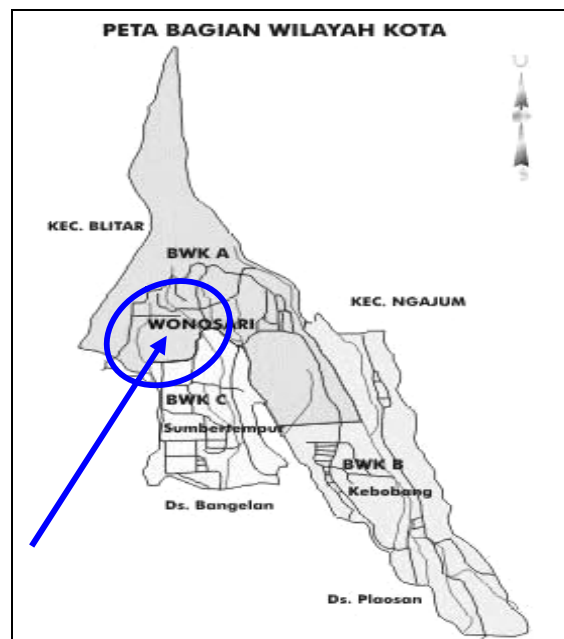


Figure 1 Map of Location

The potency at location of research was as follow: [4]

1. Area number of village was 315.3 ha. It was consisted of 215.1 ha of dry field, 100.2 ha of real estate, 313.1 ha of village farming. Area number of dominant commodity was 30 ha of sweet potato, 42 ha of corn, 3.4 ha of mangosteen, 36 ha of nilam, 10 ha of banana, 115 ha of coffee and 7 ha of clove.
2. Population of animal husbandry: 150 cows, 1200 goats, 350 rabbits, 5000 chickens.
3. Area number of rice field less than 0.5 ha was belonged to 435 farmers' families and about 1 ha was belonged to 76 farmers' families.
4. Area number of giant type of grass was about 3 ha, which green production of husbandry food was 2.5 ton/ha. Therefore there was 7.5 ton available husbandry food for each season.

Material of research was the society at Wonosari village which many of them were under poverty line. Based on data of BPS [5], income rate of population was Rp. 146,837.00 per-capita/month. Therefore if a family included 4 persons, it meant that family income was Rp. 587,348.00 and it was classified on under poverty line. The group of SEMAR breeder farmer had been established since 1984. The group was intended to increase the productivity of agriculture and focusing to goat breeding plantation. At the year of 2009, the amount of registered breeders was 25 person and 54 persons unregistered. The amount of cattle was 743 goats, it concluded 38 male-mature, 162 female-mature, 151 male-young, 130 female-young, 74 male-child, and 169 female-child.

Samples in this research were selected from key informants and the society which was under the poverty line. The samples were purposeful selection, which was based on the certain reason or consideration. Considered key informants were the men who were included in the society on Wonosari in a long time.

Samples of society were selected from population in Wonosari which had income rate under Rp. 146,837.00 per-capita/year. The first sample of population was known from the head of Wonosari village and then snow ball sampling was used to select the continued samples. There were 11 samples of population used in this research and the questionnaire was concluded 6 questions about the knowledge of Boer goat plantation.

Strategy of building communication

Berlo [6] developed a based communication model which could be applied at every communication process. The model was described as Figure 2. Design process of communication chart was as Figure 3.

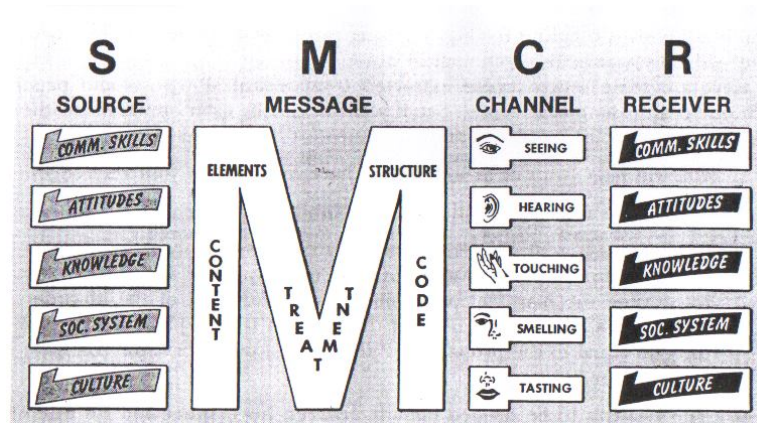


Figure 2 Berlo's Model of Communication

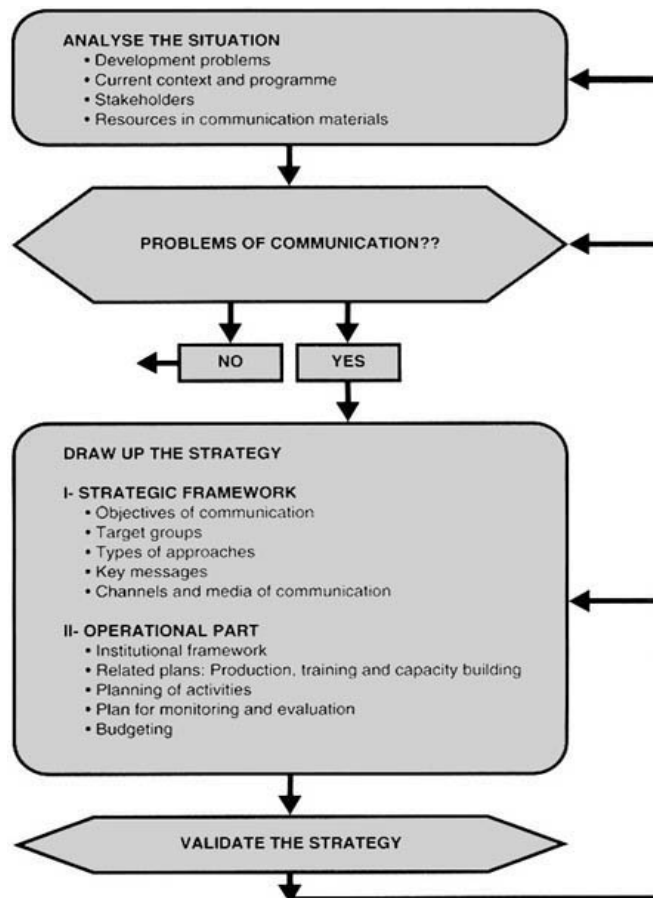


Figure 3 Design process of communication chart for building strategy
The elements communication building strategy was as follow:

1. To define and formulate the communication objects. It was concluded **Specific, Measurable, Appropriate, Realistic and Temporal (SMART)**. Figure 4 was the example of communication object

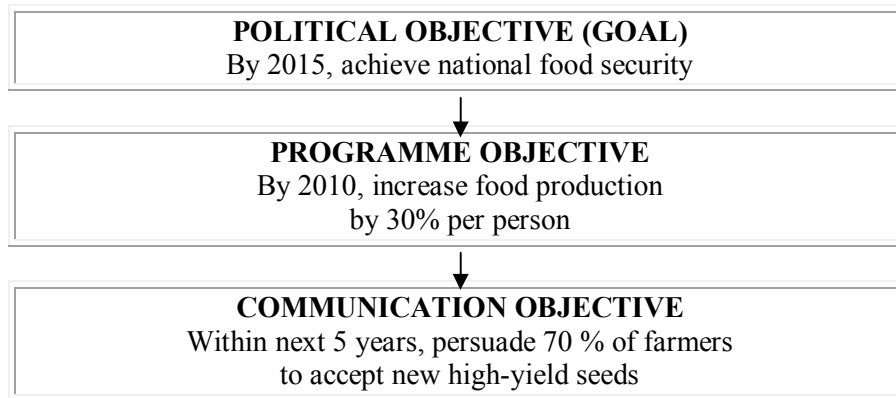


Figure 4 Example of Communication Object

2. To select the group of target. It was included primary (related to idea, attitude, and behavior) and secondary (related to help the group for changing behavior) target.
3. Communication approach such as
 - a. *Participatory community approach*
 - b. *Inter-personal communication*
 - c. *Counseling*
 - d. *Education (household education, sex education, nutrition education, recreational education, peer-group education ...)*
 - e. *Information*
 - f. *Social marketing*
 - g. *Social mobilization*
 - h. *Advocacy*
 - i. *Training*
 - j. *Functional literacy etc*
4. To make key messages such as the what and the why; the where, the when, and the how; The guarantee and support
5. To select the target and media of communication such as institutional channel, media channel, socio traditional and socio cultural channel, commercial channel.

Based on the theory communication as above, the methods were used to build suitable communication strategy in Wonosari was Observation and participation interview, and triangulation of data. Design of communication strategy of Boer goat plantation was as Table 1

Table 1 Design of communication strategy of Boer goat plantation in Wonosari village

Stage	Design of sampling and activity	Output
<p>A. Situation Analysis</p> <ol style="list-style-type: none"> 1. Identification of problem 2. To select problem prior due to wish and target demand 	<ol style="list-style-type: none"> 1. Field observation 2. Field observation questionnaire in depth interview 	<p>Some identification of Boer goat plantation problem due to priority scale</p>
<p>B. Stakeholders Analysis</p> <ol style="list-style-type: none"> 1. Identification of stakeholders 2. To define the contribution and participation of stakeholders 3. Stakeholders approach to guarantee their participation in program implementation 	<ol style="list-style-type: none"> 1. Observation 2. Field observation, participation questionnaire supported by triangulation 	<p>List of potential stakeholders and get support immaterial for program implementation</p>
<p>C. Analysis of communication resource</p> <ol style="list-style-type: none"> 1. Survey of available communication resource (pattern, system and channel of communication) 2. Alternative identification of communication resource 	<p>Filed observation, participation, questionnaire</p>	<p>To produce pattern and system of communication and the organization for helping alternative identification of communication resource</p>
<p>D. Scheme of communication strategy</p> <ol style="list-style-type: none"> 1. To define the target of communication strategy (KASA: Knowledge-Attitude-Skill & Aspirations change) 2. To determine target groups of communication 3. To determine communication approach 4. To determine key message 5. To define method and technique of communication 	<p>observation, participation, questionnaire</p>	<p>To produce communication strategy of accurate Boer goat plantation due to target of wish and demand, It was concluded :</p> <ol style="list-style-type: none"> 1. The change of measured KASA target (the breeders had skill of Boer goat plantation) 2. Target groups of communication (age, economical level) 3. Key message 4. Material and method which would use (radio, workshop)
<p>E. Socialization of program</p> <ol style="list-style-type: none"> 1. To select and determine media 2. Production of media 	<p>To corporate with mass media and the agent of media production</p>	<p>The change of Knowledge and Attitude.</p>

This research was carried out just until making communication strategies and the implementation would be carried out related in the field of society social work.

RESULTS AND DISCUSSION

Boer goat was kind of real meet stock goat which would give any advantage if it was well planted. The objects of program samples were the breeders who were more than 15 years breed Ettawah and Sumbawa goat but they only had 1-2 goats. Because of low income, some of the breeders had to crop coffee, but it did not help really to increase their income. Therefore, the range of their income just between Rp. 50,000.- to Rp. 750,000.- per-month (it had gathered with production of coffee). Based on general income, the society was under poverty line.

The research was carried out by distributing questionnaire to the breeders at Wonosari village. Most of breeders at Wonosari realized that there were many problems but they could not build the information. There

were any causes why they could not build the information: 1) the breeders were too busy to get income from others field, 2) they did not have radio or television for getting more information, 3) the constraint of finance, 4) the breeders did not realized that there was needed some knowledge for developing cattle-breeding. The recapitulation of result was described as Table 2 and 3.

Table 2 Recapitulation of questionnaire result about the knowledge level of Boer goat in Wonosari village Pre-test (before workshop) and post-test (after workshop)

No	Name of respondent	Characteristic of Boer goat (level, %)		Method of Boer goat seed selection (level, %)		Method of Boer goat Breeding (level, %)		Good stable (level, %)		Knowledge about disease (level, %)		Knowledge of Boer goat feed (level, %)	
		Pre test	Post test	Pre test	Post test	Pre test	Post test	Pre test	Post test	Pre test	Post test	Pre test	Post test
1.	Kationo	40	60	10	80	10	70	30	70	10	60	10	80
2.	Diana Jumiaty	30	80	30	50	30	60	30	70	10	60	30	80
3.	Sutiman W	40	70	10	60	10	70	30	70	10	70	40	80
4.	Supriyanto	30	60	40	80	10	70	30	60	30	70	30	50
5.	Suyanto	40	80	30	90	10	70	30	80	10	70	40	80
6.	Wiadi	10	70	10	90	10	70	30	80	30	50	40	70
7.	Bunari	10	70	10	80	10	50	10	60	10	40	10	50
8.	Edi Purwanto	40	80	40	80	30	80	40	90	30	60	40	80
9.	Basori	10	70	30	40	40	60	30	30	30	60	40	80
10.	Suwito	40	80	20	90	30	70	40	90	30	70	50	60
11.	Sandi S	40	70	20	80	20	70	30	80	30	40	30	80

Table 3 Recapitulation of questionnaire result about the knowledge level of Boer goat in Wonosari village Increment of knowledge level

No	Name of respondent	Characteristic of Boer goat (level, %)	Method of Boer goat seed selection (level, %)	Method of Boer goat Breeding (level, %)	Good stable (level, %)	Knowledge about disease (level, %)	Knowledge of Boer goat feed (level, %)	Average (level, %)
1.	Kationo	20	70	60	40	50	70	51.67
2.	Diana Jumiaty	50	20	30	40	50	50	40.00
3.	Sutiman W	30	80	60	40	60	40	51.67
4.	Supriyanto	30	40	60	30	40	20	36.67
5.	Suyanto	40	60	60	50	60	40	51.67
6.	Wiadi	60	80	60	50	20	30	50.00
7.	Bunari	60	70	40	50	30	40	48.33
8.	Edi Purwanto	40	40	50	50	30	40	41.67
9.	Basori	60	10	20	0	30	40	26.67
10.	Suwito	40	70	40	50	40	10	41.67
11.	Sandi S	30	60	50	50	10	50	41.67
	Average							43.79

The wish and demand of Wonosari society was 1) Most of the society life depended on agriculture and cattle-breeding. They only take care of Etawah and Sumbawa goat, so that they were very interested to the new kind of goat which had more advantage, 2).The response of breeders was very positive (it was increase 43.79% in level of knowledge about Boer goat after workshop). It meant that the breeders very welcome with the knowledge and skill about Boer goat plantation. They hoped that the Boer goat plantation would increase finance, and their income.

Many constraints was appeared to implement cattle-breeding demand such as there was no enough finance to buy any breeds, the knowledge of maintenance Boer goat not too good, the quality and quantity of food not so available and discontinued and it was so poor during the dry season, there was not enough information and well instruction after harvest, value rate of Boer goat was more expensive than Sumbawa goat, the quality of stable was not so available, and some breeders was not too brave by risk. The priority problems due to the breeders were 1) the quality of male breed was not too good, 2) there was breed disease mainly stiff suddenly, 3) not enough finance, 4) the quality of stable was not so available, 5) the quality of

food and the method of giving food was not too good, 6) the knowledge of stable plantation was not too enough.

There were many solutions to get implementation due to breeders demand and knowledge level based on the recapitulation at Table 1 and 2. The solutions were there was needed well instruction continuously and not only related to breeding but also the stable, continuous building, financial credit, available addition food, market, and qualified breeds

Based on the constraint and solution which was wished by the society, this program was focused on 1). To change knowledge the method of Boer goat seed selection, handling pain, food, stable, fertilizer and after harvest about Boer goat plantation. Then to change the attitude to the Boer goat and to be motivated to develop Boer goat plantation and build the society to know the chance of Boer goat plantation through this program, 3). To change the skill level of breeders so they had ability to develop Boer goat themselves and then got the finance fund to built this program.

Conclusions

Based on the research above, Wonosari society just heard about Boer goat and they breed only two kind of Boer goat namely Ettawah and Sumbawa. Strategy of communication to develop cattle-breeding at Wonosari village could be carry out by changing level of knowledge the breeders through workshop. The socialization of knowledge was consisted of breed selection, maintenance and solving disease, food, stable, fertilizer, after harvest. There was needed well instruction and implementation continuously, not only related to breeding but also the stable, continuous building, financial credit, available addition food, market, and qualified breeds

REFERENCES

1. The late Mr T. B. Jordaan of Buffelsfontein, Somerset East, stated in the first journal of the South African Boer Goat Breeders' Association published ...www.boergoatshome.com/history.php
2. Shipley, Ted dan Shipley, Linda, 2005, *Mengapa Harus Memelihara Kambing Boer, "Daging Untuk Masa Depan"*. www.indonesiaboergoat.com/whyraiseboergoat.html, retrieved at 15 Maret 2009.
3. Lu, Christoper D., 2002, Boer Goat Production: Progress and Perspective. *Office of Vice Chancellor for Academic Affairs*, University of Hawai'i, Hilo, Hawai'i 96720, USA
4. BPTP, 2009, *Malang*, BPTP Jawa Timur, retrieved at 24 Maret 2009, http://jatim.litbang.deptan.go.id/index2.php?option=com_content&do_pdf=1&id=35
5. Badan Pusat Statistik, 2008, *Profil Kemiskinan Provinsi Jawa Timur 2008*, Situs pemerintah Daerah Jawa Timur, retrieved at 23 Maret 2009, <http://www.jatimprov.co.id>
6. Mohan, T, McGregor, H & Strano, Z. 1992, *Communicating! Theory and Practice*, 3rd edition, Harcourt & Company, Australia.